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Department of Water Resources

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BULLETIN No. 65-61

QUALITY OF SURFACE WATERS IN CALIFORNIA

1960-1961

VOLUME I

NORTHERN AND CENTRAL CALIFORNIA

Part 2: Appendixes

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Administrator
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Director
Department of Water Resources

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A P P E N D I X A

PROCEDURES AND CRITERIA

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Field Methods and Procedures

Agencies which participated in the field sampling program during 1960 and 1961 are listed below, together with the number of stations sampled by each agency:

Agency	Number of Stations Sampled
State Department of Water Resources	146
State Department of Fish and Game	1
United States Corps of Engineers	6
United States Bureau of Reclamation	22
City and County of San Francisco	5
TOTAL	180

Water samples are collected in May and September for mineral, radiological and bacterial examination. Water samples are collected the other ten months for partial mineral analysis and bacterial examination. The samples collected monthly for bacterial examination are kept in portable ice boxes until mailed to the laboratory in special containers. Every effort is made to get the samples to the laboratory as quickly as possible.

At the time the samples are collected for laboratory examination, field determinations are made for dissolved oxygen (DO) by the modified Winkler method; water temperature, and pH. Visual inspection is made of the stream or lake and the physical conditions are noted.

Where possible, the sampling stations have been selected so as to be at or near stream gaging stations so that gage heights can also be recorded at the time the water samples are collected. Instantaneous stream discharges at the time of sample collection are then obtained.

Laboratory Methods and Procedures

Methods of mineral and bacterial analysis, in general, are those described in the American Public Health Association publication "Standard Methods for the Examination of Water and Sewage," 11th Edition, 1960. In some cases, the methods described in the following publications also have been employed:

U. S. Geological Survey, "Methods for Collection and Analysis of Water Samples," Water Supply Paper 1454, 1960.

California Department of Public Works, Division of Water Resources, "Methods of Analysis," October 1955.

The following tabulation indicates the constituents analyzed for in the various types of analysis performed in connection with this program.

Types of Analysis

Constituent	Standard mineral	Partial mineral	Bacterial	Radiological
Specific Conductance	x	x		
pH[a]	x	x		
Total dissolved solids	x			
Percent sodium	x	x		
Hardness	x	x		
Turbidity	x	x		
Coliform			x	
Temperature[b]	x	x		
Dissolved oxygen[b]	x	x		
Calcium	x	x		
Magnesium	x	x		
Sodium	x	x		
Potassium	x			
Carbonate	x	x		
Bicarbonate	x	x		
Sulfate	x			
Chloride	x	x		
Nitrate	x			
Fluoride	x			
Boron	x	x		
Silica	x			
Phosphate	x			
Zinc[c]	x			
Iron[c]	x			
Copper[c]	x			
Aluminum[c]	x			
Manganese[c]	x			
Arsenic[c]	x			
Hexavalent chromium[c]	x			
Dissolved alpha				x
Solid alpha				x
Dissolved beta				x
Solid beta				x

a/ pH is determined both in the field and in the laboratory.

b/ Field determination.

c/ These constituents are normally designated as heavy metals.

The methods and procedures of sample preparation and determination of radioactivity in surface waters is as follows:

1. Sample Preparation

   A. On receipt in the laboratory, each sample is well mixed, and two 250-ml portions taken. Each is acidified with a few drops of glacial acetic acid, and two drops of colloidal graphite suspension (Aquadag) added.

   B. Each portion is filtered under suction through a membrane ("Millipore") filter, which retains suspended particles of approximately 0.2 microns diameter and larger. Filters are treated with an antistatic preparation (Merix Anti-Static No. 79-OL) to eliminate any extraneous electrostatic charge.

   C. The filtrate is placed in a 250-ml volumetric flask, inverted, and the mouth placed in a 1-3/4" x 1/4" aluminum culture dish in a "chicken-feeder" type arrangement. The flask is supported by a ring stand; the dish rests on a hotplate adjusted so that the sample is taken to dryness at a temperature well below boiling.

   D. At this point, there are duplicate samples of both suspended solids and dissolved material from each original water sample ready for determination of radioactive content.

2. Determination of Radioactivity

   A. Two determinations are made on each sample, one for gross beta, one for gross alpha radioactivity. This represents a total of eight determinations for each original sample.

   B. Beta activity is determined with an internal gas flow counter operating in the proportional region, using argon-methane mixture as a flow gas. Background determinations are made before the first sample count each day, and then after each two sample counts throughout the day. Determinations of counter efficiency are made with a reference standard (thallium-204) at least twice daily. Each determination of sample and background count rate is made for a total of 1000 counts.

   C. Alpha activity is determined with a scintillation counter utilizing an activated zinc sulfide phosphor. Sample, background and efficiency measurements are made in the same manner as are the beta measurements. Uranium 238 is used as an alpha reference standard. Each determination of sample and background count rate is made for a pre-set time of 32 minutes.

3. Calculations

   A. Results are expressed as micro-micro curies per liter (uuc/l). One micro-micro curie is equivalent to 2.22 disintegrations per minute. Four values are reported for each sample: (a) beta activity in the solids retained on the filter, (b) beta activity in the filtrate (dissolved material), (c) alpha activity in the solids, and (d) alpha activity in the filtrate.

B. Sample counts are corrected for background and geometric efficiency.

C. Standard statistical procedures are utilized to compute the 0.9 error. The final result is expressed (symbolically) as $x \pm y$ uuc/l. This means that in a series of determinations on the same sample, the value of x should fall between $x - y$ and $x + y$, 90 percent of the time.

Water Quality Criteria

Criteria presented in the following sections can be utilized in evaluating the quality of water relative to existing or anticipated beneficial uses. It should be noted that these criteria are merely guides to the appraisal of water quality. Except for those constituents which are considered toxic to human beings, these criteria should be considered as suggested limiting values. A water which exceeds one or more of these limiting values need not be eliminated from consideration as a source of supply, but other sources of better quality water should be investigated.

Domestic and Municipal Water Supply

In general, water that is used for drinking or culinary purposes should be clear, colorless, odorless, pleasant to the taste, and free from toxic compounds, should not contain excessive quantities of dissolved minerals, and must be free from pathogenic organisms.

Chapter 7 of the California Health and Safety Code contains provisions which relate to water supplies used for domestic purposes throughout the State. One of these provisions covers standards for quality of domestic water supplies. In essence, this section (No. 4010.5) refers to the drinking water standards promulgated by the United States Public Health Service for water used on interstate carriers as of March 1946.

Recently the United States Public Health Service revised its drinking water standards. Portions of these new standards are presented herein. The complete standards, which cover definition of terms, bacteriological quality,

physical characteristics, chemical characteristics, radioactivity, and recommended analytical methods, are contained in the March 6, 1962, issue of the Federal Register under Rules and Regulations.

Mineral Concentrations. The following tabulation gives the limiting concentrations of chemical constituents for drinking water, as prescribed by the United States Public Health Service.

UNITED STATES PUBLIC HEALTH SERVICE
DRINKING WATER STANDARDS
1962

Constituent	Mandatory Limit in ppm
Arsenic (As)	0.05
Barium (Ba)	1.0
Cadmium (Cd)	0.01
Hexavalent chromium (Cr^{+6})	0.05
Cyanide (CN)	0.2
Lead (Pb)	0.05
Selenium (Se)	0.01
Silver (Ag)	0.05

Constituent	Nonmandatory, but recommended limit in ppm
Alkyl benzene sulphonate (detergent)	0.5
Arsenic (As)	0.01
Carbon chloroform extract (exotic organic chemicals)	0.2
Chloride (Cl)	250
Copper (Cu)	1.0
Cyanide (CN)	0.01
Fluoride (F)	1.7
Iron (Fe)	0.3
Manganese (Mn)	0.05
Nitrate (NO_3)	45
Phenols	0.001
Sulfate (SO_4)	250
Total dissolved solids	500
Zinc (Zn)	5

Interim standards for the upper limits of certain mineral constituents were adopted by the California State Board of Public Health in December 1959.

Based on these standards, temporary permits may be issued for drinking water failing to meet the United States Public Health Service Drinking Water Standards, provided the mineral constituents in the following tabulation are not exceeded.

UPPER LIMITS OF TOTAL SOLIDS AND SELECTED MINERALS IN DRINKING WATER AS DELIVERED TO THE CONSUMER
(parts per million)

	Permit	Temporary Permit
Total Solids	500 (1000)*	1500
Sulfates (SO_4)	250 (500)*	600
Chlorides (Cl)	250 (500)*	600
Magnesium (Mg)	125 (125)*	150

Fluoride Concentration. The California State Board of Public Health has defined the maximum safe amounts of fluoride ion in drinking water in relation to mean annual temperature.

Mean annual temperature	Mean monthly fluoride ion concentration (ppm)
50° F	1.5
60° F	1.0
70° F - above	0.7

Hardness. Even though hardness of water is not included in the drinking water standards, it is of importance in domestic and industrial uses. Excessive hardness in water used for domestic purposes causes increased consumption of soap and formation of scale in pipes and fixtures. The following tabulation for degrees of hardness has been suggested by the United States Geological Survey.

Range of hardness expressed as $CaCO_3$, in ppm	Relative classification
0 - 60	Soft
61 - 120	Moderately hard
121 - 200	Hard
Greater than 200	Usually requires softening

* Numbers in parentheses are maximum permissible to be used only where no other more suitable waters are available in sufficient quantity for use in the system.

Radioactivity. As part of its new drinking water standards, the United States Public Health Service recently announced limits on concentrations of radioactivity in drinking waters. These limits are as follows:

Radionuclide	Recommended maximum limits micromicrocuries per liter
Radium 226	3
Strontium 90	10
Gross beta activity	1,000*

According to the International Commission on Radiological Protection[1/], tentatively concurred in by the National Committee on Radiation Protection[2/], if the Radium-226 and Radium-228 activity in water is substantially less than 10 uuc/l, the maximum permissible concentration of otherwise unidentified radionuclides in water for individuals in the population at large may be considered to be 100 uuc/l.

For the purposes of the environmental survey of surface water made for this report, it has been assumed that the total dissolved and solid alpha activity is derived from Ra^{226} and Ra^{228}.

Industrial Water Supply

Water quality criteria for industrial waters are as varied and diversified as industry itself. Food processing, beverage production, pulp and paper manufacturing, and textile industries have exacting requirements. However, many cooling or metallurgical operations permit the use of poor quality waters. In

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* In the known absence of strontium-90 and alpha emitters.

1/ "Report on Decisions of the 1959 Meeting of the International Committee on Radiological Protection (ICRP)." Radiology, Vol. 74, No. 1, January 1960, pp. 116-119.

2/ "Somatic Radiation Dose for the General Population, Ad Hoc Committee of the National Committee on Radiation Protection and Measurements." Science, Vol. 131, No. 3399, February 19, 1960, pp. 482-486.

general, where a water supply meets drinking water standards, it is satisfactory for industrial use, either directly or following a limited amount of polishing treatment by the industry.

Irrigation Water

Criteria for mineral quality of irrigation water have been developed by the Regional Salinity Laboratories of the United States Department of Agriculture in cooperation with the University of California. Because of diverse climatological conditions and the variation in crops and soils in California, only general limits of quality for irrigation waters can be suggested.

QUALITATIVE CLASSIFICATION OF IRRIGATION WATERS

Chemical properties	Class 1 Excellent to good	Class 2 Good to injurious	Class 3 Injurious to unsatisfactory
Total dissolved solids, in ppm	Less than 700	700 - 2000	More than 2000
Conductance, in micromhos at 25°C	Less than 1000	1000 - 3000	More than 3000
Chlorides in ppm	Less than 175	175 - 350	More than 350
Sodium in percent of base constituents	Less than 60	60 - 75	More than 75
Boron in ppm	Less than 0.5	0.5 - 2.0	More than 2.0

These criteria have limitations in actual practice. In many instances a water may be wholly unsuitable for irrigation under certain conditions of use, and yet be completely satisfactory under other circumstances. Consideration also should be given to soil permeability, drainage, temperature, humidity, rainfall, and other conditions that can alter the response of a crop to a particular quality of water.

Fish and Aquatic Life

Water of suitable quality and quantity is a fundamental requirement for the existence of an abundant supply of fish and aquatic life. It is very important that water quality conditions be such as to maintain an abundant supply of food required by fish and other desirable forms of aquatic life. Streams utilized for the propagation of fish and aquatic life should be free of toxic or harmful concentrations of mineral and organic substances and excessive turbidity. Extensive field and laboratory studies conducted by the United States Fish and Wildlife Service show that, among other things, the water in streams supporting a mixed fauna of fresh water fish such as bluegill, bass, crappie, and catfish should have the following properties:

(a) Dissolved oxygen not less than 5 ppm (at least 6 ppm for Salmonids),

(b) pH range between 6.5 and 8.5,

(c) Ionizable salts, as indicated by conductivity, between 150 and 500 micromhos at 25° Centigrade, and in general not exceeding 1,000 micromhos.

(d) Ammonia not exceeding 1.5 ppm.

Mineral salts of high toxicity to fish are those of silver, mercury, copper, zinc, lead, cadmium, nickel, trivalent and hexavalent chromium, and others. Some pairs of toxicants, such as copper and zinc (also copper and cadmium, nickel and zinc) are far more toxic when combined than when they occur individually. Other toxic substances, when combined, neutralize each other through antagonism or chemical reaction (e.g., free cyanide combines with toxic heavy metal cations, such as nickel and copper ions, to form relatively harmless metallocyanide complexes).

The increasing use of household and industrial detergents, as well as the expansion in the manufacture and use of agriculture insecticides, poses serious hazards to fish and aquatic life. Preliminary studies, for example,

indicate that one of the most common household detergents is lethal to relatively hardy fish at very low concentrations. This detergent was lethal to fish in fresh water at concentrations below 0.1 ppm and below 0.005 ppm in salt water. The increase in toxicity in salt water can probably be attributed to the fact that marine fishes must ingest water to maintain their osmotic balance.

Development and use of water resources, including the construction of dams for storage of water, frequently affect water temperatures which in turn affect fish and other aquatic life. Optimum water temperatures for cold water fish, such as trout and salmon, normally lie between 32° and 65° Fahrenheit. The cold water species are generally intolerant of temperatures above 75° Fahrenheit and will seek the lower temperature where possible. Warm water fish such as minnows, carp, catfish, perch, sunfish, and bass normally live in water having temperatures ranging from near 32° to 86° Fahrenheit. Acclimatization enables certain warm water species to live in waters having temperatures as high as 90° Fahrenheit, although they will migrate, where possible, to waters below 86° Fahrenheit.

Chemical Classification of Waters

Waters are classified, with respect to mineral composition, in terms of the predominant ions. Specifically, the name of an ion is used where it constitutes at least half of its ionic group, expressed in equivalents per million (epm). Where no one ion fulfills the requirement, a hyphenated combination of the two most abundant constituents is used. Thus a calcium bicarbonate water denotes that calcium constitutes at least half of the cations and bicarbonate represents at least half of the anions. Where calcium, though predominant, is less than half of the total cations with sodium next in abundance, and where bicarbonates are more than half of the total anions, the name is modified to calcium-sodium bicarbonate.

A P P E N D I X B

BASIC DATA FOR 1960

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Note: Radioassays of snow at various locations in the State which appeared in earlier editions of this series will be found in "Radiological Health News," a quarterly publication of the California Department of Public Health.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

ANTELOPE CREEK NEAR TENNANT (STA. 1e)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/5 1635	5	32	12.4	85	65.9	7.1	7.6 / 0.38	1.5 / 0.12	4.4 / 0.19	1.2 / 0.03	0.0 / 0.00	38 / 0.62	0.0 / 0.00	3.0 / 0.08	0.0 / 0.00	0.1 / 0.01	0.0	36		73[f]	26	25	0			
2/8 1520	81	32	10.7	73	38.1	7.1	2.4 / 0.12	1.9 / 0.16	1.7 / 0.07	0.7 / 0.02	0.0 / 0.00	19 / 0.31	0.4 / 0.01	0.8 / 0.02	1.5 / 0.02	0.3 / 0.02	0.1	19		38[f]	19	14	0			
3/9 0800	22	33	11.6	81	53.6	7.2	/ 0.48[c]		2.5 / 0.11		0.0 / 0.00	28 / 0.46		1.5 / 0.04			0.0			62[e]	19	24	1	30		
4/12 1500	53	41	10.6	83	47.2	7.0	/ 0.44[c]		1.9 / 0.08		0.0 / 0.00	28 / 0.46		1.0 / 0.03			0.0			54[e]	15	22	0	3		
5/3 0910	43	41	10.2	80	48.4	7.2	4.4 / 0.22	1.8 / 0.15	2.2 / 0.10	1.4 / 0.04	0.0 / 0.00	28 / 0.46	2.0 / 0.04	0.0 / 0.00	0.2 / 0.00	0.0 / 0.00	0.0	25	Fe 0.05 Pb 0.01[d] Al 0.03 PO_4 0.00	51[f]	20	19	0	1		
6/7 1620	74	51	9.0	80	39.1	7.2	/ 0.32[c]		1.0 / 0.04		0.0 / 0.00	22 / 0.36		0.5 / 0.01			0.0			45[e]	11	16	0	25		
7/6 0730	21	50	9.3	82	55.6	7.3	/ 0.46		2.2 / 0.10		0.0 / 0.00	33 / 0.54		1.0 / 0.03			0.0			64[e]	18	23	0	1		
8/10 0915	0.9	52	9.0	81	61.8	7.3	/ 0.52[c]		3.1 / 0.13		0.0 / 0.00	37 / 0.61		2.2 / 0.06			0.0			71[e]	20	26	0	1		
9/7 0710	11	46	9.7	81	63.4	7.3	5.6 / 0.28	2.7 / 0.22	3.6 / 0.16	0.8 / 0.02	0.0 / 0.00	40 / 0.66	0.0 / 0.00	0.8 / 0.02	0.0 / 0.00	0.0 / 0.00	0.0	29	Fe 0.03 PO_4 0.00[d] Al 0.08	63[f]	23	25	0	3		
10/12 0820	13	42	10.2	81	63.5	7.3	/ 0.50[c]		2.9 / 0.13		0.0 / 0.00	36 / 0.59		0.4 / 0.01			0.0			73[e]	21	25	0	4		
11/9 0745	12	35	11.4	81	62.9	7.3	/ 0.56[c]		2.8 / 0.12		0.0 / 0.00	39 / 0.64		0.5 / 0.01			0.0			72[e]	18	28	0	2		
12/14 1045	16	32	11.9	81	58.8	7.1	/ 0.46[c]		3.2 / 0.14		0.0 / 0.00	35 / 0.57		0.0 / 0.00			0.0			68[e]	23	23	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

BIG RIVER NEAR MOUTH (STA. 8c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million													Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
	Estimated		ppm	%Sat			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents			Total ppm	N.C. ppm			
1960																										USGS
1/11	Not Sampled																									
2/9 1000	1,300	51	10.3	93	91.2	7.0	0.86[c]		5.2 / 0.23		0.0 / 0.00	36 / 0.59		11 / 0.31			0.0			60[e]	21	43	13	1,140		
3/7 1620	890	53	10.2	95	86.4	7.1	0.64[c]		4.5 / 0.20		0.0 / 0.00	34 / 0.56		6.5 / 0.18			0.0			57[e]	24	32	4	750		
4/4 1545	150	59	9.7	97	147	7.3	1.16[c]		7.3 / 0.32		0.0 / 0.00	74 / 1.21		7.5 / 0.21			0.0			96[e]	22	58	0	25		
5/6 0845	60	55	9.4	89	164	7.3	15 / 0.75	6.2 / 0.51	9.1 / 0.40	1.3 / 0.03	0.0 / 0.00	84 / 1.38	7.0 / 0.15	7.5 / 0.21	0.2 / 0.00	0.0 / 0.00	0.2	19	Fe 0.08 PO_4 0.10[d] Al 0.03	107[f]	24	63	0	1		
6/6 1400	35	67	8.7	95	200	7.5	1.56[c]		10 / 0.44		0.0 / 0.00	111 / 1.82		11 / 0.31			0.2			131[e]	22	78	0	1		
7/11 1730	5.0	70	9.1	103	216	7.7	1.78[c]		12 / 0.52		0.0 / 0.00	119 / 1.95		6.0 / 0.17			1.0			142[e]	23	89	0	4		
8/1 1445	5.0	69	8.7	97	219	7.3	1.66[c]		13 / 0.57		0.0 / 0.00	118 / 1.93		8.5 / 0.24			0.4			144[e]	26	83	0	1		
9/12 1600	10	65	8.8	94	220	7.4	21 / 1.05	8.1 / 0.67	12 / 0.52	1.3 / 0.03	0.0 / 0.00	125 / 2.05	1.0 / 0.02	7.0 / 0.20	0.1 / 0.00	0.0 / 0.00	0.5	14	Al 0.03 PO_4 0.10[d]	127[f]	23	86	0	2		
10/10 1400	9	54	9.1	85	232	7.3	22 / 1.10	8.8 / 0.72	13 / 0.57		0.0 / 0.00	123 / 2.02		8.5 / 0.24			0.4			152[e]	24	91	0	1		
11/7 1435	10	54	9.0	84	235	7.3	1.88[c]		14 / 0.61		0.0 / 0.00	123 / 2.02		14 / 0.39			0.5			154[e]	24	94	0	2		
12/5 1430	75	49	11.0	97	156	7.3	1.20[c]		9.0 / 0.39		0.0 / 0.00	76 / 1.25		7.0 / 0.20			0.1			102[e]	25	60	0	14		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

BUTTE CREEK NEAR MACDOEL (STA. 1d)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in ppm / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/5 1535	16	33	12.3	85	82.2	7.1	10 / 0.50	1.9 / 0.16	5.0 / 0.22	1.9 / 0.05	0.0 / 0.00	48 / 0.79	0.0 / 0.00	6.0 / 0.17	0.0 / 0.00	0.0 / 0.00	0.0	38		87[f]	24	33	0			
2/8 1735	140	32	10.7	73	60.2	6.9	5.5 / 0.27	1.8 / 0.15	3.2 / 0.14	1.8 / 0.05	0.0 / 0.00	34 / 0.56	1.0 / 0.02	0.5 / 0.01	1.1 / 0.02	0.4 / 0.02	0.0	25		57[f]	23	20	0			
3/9 1005	26	38	10.8	81	59.9	7.2	/ 0.50[c]		2.6 / 0.11		0.0 / 0.00	30 / 0.49		1.8 / 0.05			0.0			58[e]	18	25	0	50		
4/12 1625	30	51	9.5	85	65.7	7.2	/ 0.64[c]		3.1 / 0.13		0.0 / 0.00	40 / 0.66		0.8 / 0.02			0.1			63[e]	17	32	0	8		
5/3 1025	16	51	9.4	84	71.1	7.3	6.6 / 0.33	2.3 / 0.19	3.4 / 0.15	2.4 / 0.06	0.0 / 0.00	40 / 0.66	2.8 / 0.06	0.6 / 0.02	0.3 / 0.00	0.1 / 0.01	0.2	26	Fe 0.12 / 0.10 Al; PO_4 0.00[d]	65[f]	21	26	0	2		
6/7 1745	21	67	7.3	79	64.3	7.5	/ 0.51[c]		3.0 / 0.13		0.0 / 0.00	38 / 0.62		1.2 / 0.03			0.0			62[e]	20	25	0	25		
7/6 0900	1.8	62	7.8	79	74.4	7.3	/ 0.62[c]		3.6 / 0.16		0.0 / 0.00	45 / 0.74		1.0 / 0.03			0.0			72[e]	21	31	0	2		
8/10 0820	11.3	62	7.3	74	73.1	7.3	/ 0.54[c]		4.7 / 0.20		0.0 / 0.00	45 / 0.74		0.5 / 0.01			0.0			71[e]	27	27	0	4		
9/7 0900	1.8	56	8.5	81	82.9	7.3	7.6 / 0.38	3.2 / 0.26	5.2 / 0.23	1.3 / 0.03	0.0 / 0.00	50 / 0.82	1.0 / 0.02	2.2 / 0.06	0.0 / 0.00	0.3 / 0.02	0.1	17	Fe 0.03 / 0.03 Al; PO_4 0.00[d]	63[f]	26	32	0	7		
10/12 0915	6.2	45	9.6	79	74.1	7.3	/ 0.54[c]		3.9 / 0.17		0.0 / 0.00	42 / 0.69		0.4 / 0.01			0.0			72[e]	24	27	0	4		
11/9 0910	5.0	35	11.4	81	73.3	7.2	/ 0.65[c]		3.6 / 0.16		0.0 / 0.00	46 / 0.75		0.8 / 0.02			0.0			71[e]	20	32	0	2		
12/14 1005	Not Available	32	11.7	80	69.8	7.1	/ 0.54[c]		4.2 / 0.18		0.0 / 0.00	42 / 0.69		0.0 / 0.00			0.0			68[e]	25	27	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1
ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

EEL RIVER NEAR DOS RIOS (STA. 5d)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 1500	443	42	10.0	79	189	7.7[b]	1.68[c]		8.5 / 0.37		0.0 / 0.00	82 / 1.34		7.0 / 0.20			0.4			113[e]	18	84	17	200		
2/9 1325	36,300	47	11.5	97	88.5	7.3[a]	0.84[c]		2.8 / 0.12		0.0 / 0.00	40 / 0.66		4.5 / 0.13			0.1			53[e]	12	42	9	1,250		
3/8 1030	15,980	47	11.3	96	105	7.3[a]	0.92[c]		2.7 / 0.12		0.0 / 0.00	48 / 0.79		3.0 / 0.08			0.1			63[e]	12	46	7	850		
4/5 0945	1,286	57	9.8	94	135	7.5[a]	1.32[c]		4.0 / 0.17		0.0 / 0.00	72 / 1.18		2.5 / 0.07			0.1			81[e]	11	66	7	70		
5/5 0830	247	59	8.3	82	169	7.0[a]	19 / 0.95	6.9 / 0.57	5.3 / 0.23	1.1 / 0.03	0.0 / 0.00	94 / 1.54	10 / 0.21	3.5 / 0.10	0.2 / 0.00	0.0 / 0.00	0.2	12	Fe 0.03 Cu 0.01[d] Al 0.08 Zn 0.01 PO_4 0.05	104[f]	13	76	0	2		
6/7 0935	132	65	8.4	89	189	7.9[a]	1.71[c]		4.4 / 0.19		0.0 / 0.00	104 / 1.70		5.8 / 0.16			0.2			113[e]	10	85	0	10		
7/12 1130	29.4	77	8.4	100	229	7.9[a]	2.10[c]		7.7 / 0.33		0.0 / 0.00	129 / 2.11		10 / 0.28			0.3			137[e]	14	105	0	1		
8/2 0820	7.5	72	6.9	78	232	7.7[a]	2.00[c]		9.5 / 0.41		0.0 / 0.00	122 / 2.00		9.0 / 0.25			0.4			139[e]	17	100	0	1		
9/13 0935	3.7	68	7.9	86	228	7.9[a]	24 / 1.20	8.0 / 0.66	10 / 0.44	1.5 / 0.04	0.0 / 0.00	114 / 1.87	18 / 0.37	5.5 / 0.16	0.1 / 0.00	0.1 / 0.01	0.5	8.5	Al 0.01 Cu 0.01[d] PO_4 0.05	132[f]	19	93	0	3		
10/11 0935	11.4	56	9.8	93	340	7.9[a]	2.00[c]		25 / 1.09		0.0 / 0.00	115 / 1.88		6.8 / 0.19			0.4			204[e]	35	100	6	13		
11/8 0930	37	53	10.1	92	271	7.7[a]	2.34[c]		9.2 / 0.40		0.0 / 0.00	130 / 2.13		6.0 / 0.17			0.4			162[e]	15	117	10	1		
12/6 0810	295	42	11.9	94	154	7.4[a]	1.32[c]		5.6 / 0.24		0.0 / 0.00	75 / 1.23		3.5 / 0.10			0.1			92[e]	15	66	4	12		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

EEL RIVER NEAR McCANN (STA. 5)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Not Rated																									USGS
1/12 1215		43	11.4	92	174	7.3	1.68[c]		5.8 / 0.25		0.0 / 0.00	74 / 1.21		6.0 / 0.17			0.2			94[e]	13	84	23	50	Median 2.3	
2/10 1330		47	11.6	98	111	7.7	1.04[c]		2.9 / 0.13		0.0 / 0.00	54 / 0.89		4.5 / 0.13			0.0			60[e]	11	52	8	800	Maximum 62.	
3/8 1540		50	11.5	102	108	7.9	1.04[c]		2.8 / 0.12		0.0 / 0.00	54 / 0.89		3.5 / 0.10			0.0			58[e]	10	52	8	850	Minimum <0.045	
4/5 1500		60	9.1	91	143	7.5	1.38[c]		3.4 / 0.15		0.0 / 0.00	75 / 1.23		3.0 / 0.08			0.1			77[e]	10	69	7	120		
5/16 1445		60	8.7	87	168	7.7	21 / 1.05	6.2 / 0.51	4.0 / 0.17	0.9 / 0.02	0.0 / 0.00	91 / 1.49	11 / 0.23	3.0 / 0.08	0.0 / 0.00	0.1 / 0.01	0.0	12	Fe 0.05 PO_4 0.10[d] Al 0.09	103[f]	10	78	3	9		
6/7 1320		71	8.2	92	167	7.9	1.60[c]		3.1 / 0.13		0.0 / 0.00	92 / 1.51		3.0 / 0.08			0.0			90[e]	8	80	5	25		
7/12 1735		75	8.6	100	247	7.7	2.28[c]		6.0 / 0.26		0.0 / 0.00	136 / 2.23		8.0 / 0.23			0.1			133[e]	10	114	2	2		
8/2 1330		74	8.8	102	272	7.9	2.52[c]		8.0 / 0.35		0.0 / 0.00	151 / 2.47		8.5 / 0.24			0.2			146[e]	12	126	2	1		
9/13 1655		70	8.9	99	278	7.7	39 / 1.95	8.4 / 0.69	9.7 / 0.42	1.4 / 0.04	0.0 / 0.00	148 / 2.43	22 / 0.46	8.5 / 0.24	0.2 / 0.00	0.1 / 0.01	0.2	12	PO_4 0.00[d]	174[f]	14	132	11	1		
10/11 1315		62	10.1	102	284	7.5	2.60[c]		6.9 / 0.30		0.0 / 0.00	141 / 2.31		5.9 / 0.17			0.2			153[e]	10	130	14	10		
11/8 1335		58	9.6	93	301	7.5	2.76[c]		8.0 / 0.35		0.0 / 0.00	118 / 1.93		4.5 / 0.13			0.2			162[e]	11	138	41	1		
12/6 1245		45	11.6	96	153	7.3	1.36[c]		4.5 / 0.20		0.0 / 0.00	74 / 1.21		2.8 / 0.08			0.1			82[e]	13	68	7	20		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

EEL RIVER, MIDDLE FORK AT DOS RIOS (STA. 5c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 1050	556	40	12.8	98	206	7.6[b]	1.92[c]		7.0 / 0.30		0.0 / 0.00	90 / 1.48		10 / 0.28			0.2			122[e]	14	96	22	40		
2/9	Not Sampled - Inaccessible																									
3/8 1200	6,200	45	12.0	99	103	7.7[a]	0.98[c]		2.2 / 0.10		0.0 / 0.00	48 / 0.79		2.5 / 0.07			0.0			62[e]	9	49	10	700		
4/5 1030	2,190	53	10.2	93	119	7.5[a]	1.18[c]		2.2 / 0.10		0.0 / 0.00	63 / 1.03		3.0 / 0.08			0.0			70[e]	8	59	7	120		
5/5 1005	830	56	9.6	91	145	6.9[a]	18 / 0.90	6.1 / 0.50	2.9 / 0.13	0.7 / 0.02	0.0 / 0.00	78 / 1.28	12 / 0.25	2.5 / 0.07	0.0 / 0.00	0.2 / 0.01	0.1	11	Al 0.08 Fe 0.05[d] Cu 0.01 PO_4 0.05	92[f]	8	70	6	7		
6/7 1015	616	68	8.5	93	147	7.7[a]	1.34[c]		2.0 / 0.09		0.0 / 0.00	78 / 1.28		3.4 / 0.10			0.1			87[e]	6	67	3	10		
7/12 1225	70	78	8.3	100	247	7.9[a]	2.28[c]		6.4 / 0.28		0.0 / 0.00	128 / 2.10		12 / 0.34			0.2			146[e]	11	114	9	1		
8/2 0900	26.5	72	8.2	93	291	7.9[a]	2.54[c]		9.9 / 0.43		0.0 / 0.00	136 / 2.23		14 / 0.39			0.2			172[e]	14	127	15	1		
9/13 1050	12	69	9.2	101	331	7.9[a]	38 / 1.90	11 / 0.94	13 / 0.57	1.3 / 0.03	0.0 / 0.00	124 / 2.03	30 / 0.62	28 / 0.79	0.1 / 0.00	0.1 / 0.01	0.3	10	Fe 0.01 PO_4 0.00[d] Zn 0.01	193[f]	17	142	40	1		
10/11 1015	11	57	10.0	96	368	7.7[a]	2.98[c]		14 / 0.61		0.0 / 0.00	121 / 1.98		26 / 0.73			0.3			218[e]	17	149	50	15		
11/8 1000	38	53	10.2	93	371	7.7[a]	3.04[c]		16 / 0.70		0.0 / 0.00	132 / 2.16		20 / 0.56			0.3			220[e]	19	152	44	2		
12/6 0900	940	40	12.6	97	154	7.5[a]	1.40[c]		5.3 / 0.23		0.0 / 0.00	76 / 1.25		2.0 / 0.06			0.0			91[e]	14	70	8	35		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

EEL RIVER AT SCOTIA (STA. 6)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/12 1315	3,830	45	11.0	94	194	7.3	/ 1.68[c]		8.5 / 0.37		0.0 / 0.00	82 / 1.34		9.0 / 0.25			0.2			112[e]	18	84	17	200	Median 6.2	
2/10 1415	97,600	50	10.8	98	171	7.3	/ 1.60[c]		3.8 / 0.17		0.0 / 0.00	74 / 1.21		6.2 / 0.17			0.0			99[e]	10	80	19	1,000	Maximum 2,400.	
3/9 0700	41,900	49	10.7	96	137	7.4	/ 1.28[c]		3.6 / 0.16		0.0 / 0.00	64 / 1.05		10 / 0.28			0.1			79[e]	11	64	12	850	Minimum 0.23	
4/5 1615	8,960	63	9.0	93	161	7.4	/ 1.42[c]		4.5 / 0.20		0.0 / 0.00	78 / 1.28		6.0 / 0.17			0.1			93[e]	12	71	7	90		
5/4 1300	3,350	63	9.8	101	176	7.2	22 / 1.10	6.3 / 0.52	5.3 / 0.23	1.0 / 0.03	0.0 / 0.00	96 / 1.57	10 / 0.21	4.5 / 0.13	0.2 / 0.00	0.0 / 0.00	0.1	13	Fe 0.04 PO4 0.10 Al 0.10 Cu 0.01 [d]	109[f]	12	81	2	10		
6/7 1415	3,050	71	8.5	95	176	7.7	/ 1.59[c]		4.0 / 0.17		0.0 / 0.00	96 / 1.57		5.0 / 0.14			0.0			102[e]	10	80	1	50		
7/12 1935	510	75	10.2	119	239	8.3	/ 2.20[c]		6.8 / 0.30		0.0 / 0.00	137 / 2.25		9.0 / 0.25			0.1			138[e]	12	110	0	3		
8/2 1430	282	71	8.5	96	287	7.7	/ 2.62[c]		9.1 / 0.40		0.0 / 0.00	166 / 2.72		10 / 0.28			0.1			166[e]	13	131	0	3		
9/13 1715	125	68	9.0	98	298	7.9	36 / 1.80	12 / 0.96	9.2 / 0.40	1.4 / 0.04	0.0 / 0.00	172 / 2.82	16 / 0.33	5.8 / 0.16	0.1 / 0.00	0.0 / 0.00	0.1	9.2	Al 0.04 Cu 0.01 PO4 0.10 [d]	175[f]	12	138	0	2		
10/11 1415	168	60	11.0	110	294	7.7	37 / 1.85	9.6 / 0.79	8.9 / 0.39		0.0 / 0.00	161 / 2.64		7.0 / 0.20			0.0			170[e]	13	132	0	1		
11/8 1445	135	58	8.6	84	307	7.9	/ 2.94[c]		9.4 / 0.41		0.0 / 0.00	174 / 2.85		16 / 0.45			0.1			177[e]	12	147	4	0.9		
12/6 1345	6,300	53	10.1	92	242	7.3	/ 2.20[c]		7.1 / 0.31		0.0 / 0.00	108 / 1.77		5.5 / 0.16			0.2			140[e]	12	110	21	46		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

EEL RIVER, SOUTH FORK NEAR MIRANDA (STA. 7)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/12 1115	1,770	43	11.5	92	142	7.3	—/1.32[c]		6.5/0.28		0.0/0.00	64/1.05		7.0/0.20			0.1			84[e]	18	66	14	100	Median 6.2	
2/10 1220	21,100	49	10.9	95	92.6	7.3	—/0.76[c]		3.7/0.16		0.0/0.00	36/0.59		5.2/0.15			0.0			55[e]	17	38	8	1,500	Maximum 230.	
3/8 1445	9,800	51	10.5	94	96.7	7.1	—/0.78[c]		3.6/0.16		0.0/0.00	40/0.66		5.8/0.16			0.0			58[e]	17	39	6	600	Minimum 0.046	
4/5 1335	2,140	59	9.7	96	129	7.3	—/1.10[c]		4.5/0.20		0.0/0.00	64/1.05		5.8/0.16			0.0			77[e]	15	55	3	40		
5/5 0620	898	59	9.3	91	154	7.2	18/0.90	5.6/0.46	6.0/0.26	1.0/0.03	0.0/0.00	84/1.38	8.0/0.17	5.0/0.14	0.3/0.00	0.0/0.00	0.1	16	Fe 0.03 PO_4 0.10[d] Al 0.09	101[f]	16	68	0	10		
6/7 1240	1,100	67	8.8	95	152	7.7	—/1.34[c]		6.1/0.27		0.0/0.00	84/1.38		8.0/0.23			0.0			90[e]	17	67	0	3		
7/12 1525	234	78	10.6	128	198	8.1	—/1.80[c]		7.2/0.31		4/0.13	105/1.72		6.0/0.17			0.1		Tot. Alk. 113	118[e]	15	90	0	4		
8/2 1215	108	73	9.5	109	227	8.1	—/1.97[c]		8.8/0.38		0.0/0.00	129/2.11		4.8/0.14			0.1			135[e]	16	99	0	1		
9/13 1415	68	72	10.0	114	251	7.9	27/1.35	10/0.85	8.6/0.37	1.4/0.04	0.0/0.00	142/2.33	9.0/0.19	5.8/0.16	0.1/0.00	0.0/0.00	0.1	13	Al 0.01 Cu 0.01[d] PO_4 0.10	145[f]	14	110	0	1		
10/11 1240	124	59	10.2	100	258	7.7	30/1.50	10/0.82	8.8/0.38		0.0/0.00	138/2.26		8.5/0.24			0.0			153[e]	14	116	3	1		
11/8 1220	60	56	10.2	97	264	7.7	—/2.36[c]		9.7/0.42		2/0.07	136/2.23		15/0.42			0.2		Tot. Alk. 140	157[e]	15	118	3	1		
12/6 1145	1,180	46	11.5	96	130	7.3	—/1.12[c]		6.3/0.27		0.0/0.00	62/1.02		4.2/0.12			0.0			77[e]	19	56	5	24		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

GUALALA RIVER, SOUTH FORK NEAR ANNAPOLIS (STA. 9a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/11 1200	198	47	10.3	87	233	7.4	—/1.98[c]		13/0.57		0.0/0.00	114/1.87		9.0/0.25			0.1			140[e]	22	99	6	80	Median 2.3	
2/8 1150	19,000	55	10.0	94	77.3	7.0	—/0.62[c]		3.6/0.16		0.0/0.00	36/0.59		7.0/0.20			0.0			46[e]	21	31	1	3,000	Maximum 230.	
3/7 1235	9,600	54	9.1	85	91.3	7.3	—/0.72[c]		4.2/0.18		0.0/0.00	36/0.59		5.8/0.16			0.0			55[e]	20	36	6	1,100	Minimum 0.06	
4/4 1215	321	61	9.5	96	192	7.5	—/1.62[c]		7.5/0.33		0.0/0.00	94/1.54		8.0/0.23			0.0			115[e]	17	81	4	25		
5/10 1045	71	60	7.8	78	234	7.0	24/1.20	9.7/0.80	9.8/0.43	1.3/0.03	0.0/0.00	126/2.07	9.0/0.19	9.5/0.27	0.3/0.00	0.0/0.00	0.2	14	Fe 0.02 PO_4 0.05[d] Al 0.06	140[f]	17	100	0	1		
6/6 1030	41	66	8.3	89	258	7.5	—/2.20[c]		12/0.52		0.0/0.00	146/2.39		11/0.31			0.1			155[e]	19	110	0	1		
7/11 1205	20	69	10.3	114	267	7.7	—/2.32[c]		12/0.52		4/0.13	146/2.39		9.5/0.27			0.0			160[e]	18	116	0	4		
8/1 1100	9.0	68	10.0	109	275	7.5	—/2.23[c]		14/0.61		0.0/0.00	152/2.49		9.0/0.25			0.1			165[e]	21	111	0	1		
9/12 1110	6.0	70	12.7	142	282	8.1	26/1.30	14/1.12	13/0.57	1.4/0.04	3/0.10	159/2.61	7.0/0.15	7.8/0.22	0.2/0.00	0.0/0.00	0.1	15	PO_4 0.10[d]	166[f]	19	121	0	1		
10/10 1045	8.9	58	8.6	84	300	7.3	27/1.35	15/1.21	15/0.65		0.0/0.00	163/2.67		11/0.31			0.0			180[e]	20	128	0	1		
11/7 1145	8.9	59	10.1	100	302	7.5	—/2.59[c]		14/0.61		0.0/0.00	164/2.69		13/0.37			0.1			181[e]	19	130	0	1		
12/5 1135	455	49	10.7	93	184	7.4	—/1.32[c]		9.0/0.39		0.0/0.00	66/1.08		7.2/0.20			0.1			110[e]	23	66	12	18		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

KLAMATH RIVER NEAR COPCO (STA. 1)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/6 1500	2,410		10.1		141	6.8	0.96[c]		13 / 0.57		0.0 / 0.00	72 / 1.18		3.0 / 0.08			0.1			102[e]	37	48	0	3	Median 1.3	
2/3 1030	2,550	39			153	6.8	1.02[c]		12 / 0.52		0.0 / 0.00	68 / 1.11		4.0 / 0.11			0.0			109[e]	34	51	0	30	Maximum >7,000.	
3/1 1245	2,550	41	10.0	78	174	7.2	1.32[c]		16 / 0.70		0.0 / 0.00	82 / 1.34		4.5 / 0.13			0.1			124[e]	35	66	0	35	Minimum 0.06	
4/7 1100	3,040	53	9.1	83	286	7.2	1.92[c]		21 / 0.91		0.0 / 0.00	97 / 1.59		5.0 / 0.14			0.2			204[e]	32	96	16	5		
5/4 1100	3,010	52	9.0	81	274	7.5	17 / 0.85	9.8 / 0.81	25 / 1.09	4.1 / 0.10	0.0 / 0.00	91 / 1.49	53 / 1.10	7.0 / 0.20	1.2 / 0.02	0.2 / 0.01	0.2	22	Fe 0.04 Cu 0.03[d] Al 0.20 Zn 0.09 PO_4 0.30	185[f]	38	83	8	10		
6/10 0940	1,420	59	8.2	81	169	7.2	1.26[c]		12 / 0.52		0.0 / 0.00	90 / 1.48		5.5 / 0.16			0.0			120[e]	29	63	0	5		
7/6 1230	1,300	69	6.7	74	154	7.2	1.06[c]		12 / 0.52		0.0 / 0.00	79 / 1.29	6.0 / 0.12	6.2 / 0.17			0.1			109[e]	33	53	0	1		
8/10	1,390	70	8.9	99	158	7.3	1.10[c]		12 / 0.52		0.0 / 0.00	84 / 1.38	7.6 / 0.16	0.8 / 0.02			0.1			112[e]	32	55	0	3		
9/7 1630	1,530	64	7.5	78	168	7.4	8.8 / 0.44	7.5 / 0.62	16 / 0.70	2.7 / 0.07	0.0 / 0.00	87 / 1.43	9.0 / 0.19	4.5 / 0.13	2.5 / 0.04	0.3 / 0.02	0.1	43	Fe 0.05 Zn 0.02[d] PO_4 0.60 As 0.01 Cu 0.01	137[f]	38	53	0	20		
10/6 1300	1,540	60	6.2	62	178	7.0	1.12[c]		15 / 0.65		0.0 / 0.00	86 / 1.41		4.1 / 0.12			0.1			126[e]	37	56	0	16		
11/7 1130	2,470	49	8.6	75	209	7.3	1.14[c]		21 / 0.91		0.0 / 0.00	82 / 1.34		5.0 / 0.14			0.1			148[e]	44	57	0	1		
12/12 1145	3,250	38	10.1	75	242	7.5	1.30[c]		26 / 1.13		0.0 / 0.00	102 / 1.67		5.2 / 0.15			0.1			172[e]	47	65	0	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

KLAMATH RIVER ABOVE HAMBURG RESERVOIR SITE (STA. 1c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Not Rated																									USGS
1/5 0930		34	13.7	96	167	7.5	1.14[c]		14 / 0.61		0.0 / 0.00	86 / 1.41		5.8 / 0.16			0.1			115[e]	35	57	0	4		
2/9 1030		40	10.6	82	221	7.3	1.76[c]		14 / 0.61		0.0 / 0.00	106 / 1.74		7.8 / 0.22			0.1			152[e]	26	88	1	125		
3/8 1000		43	11.3	91	220	7.7	1.68[c]		16 / 0.70		0.0 / 0.00	108 / 1.77		6.0 / 0.17			0.2			152[e]	29	84	0	140		
4/12 0830		51	10.2	91	289	7.7	2.14[c]		21 / 0.91		0.0 / 0.00	111 / 1.82		6.5 / 0.18			0.2			200[e]	30	107	16	8		
5/4 1130		53	11.6	106	283	7.9	19 / 0.95	11 / 0.91	22 / 0.96	4.9 / 0.13	0.0 / 0.00	104 / 1.70	45 / 0.94	7.3 / 0.21	0.5 / 0.01	0.2 / 0.01	0.2	24	Fe 0.06 PO_4 0.15[d] Al 0.13	185[f]	33	93	8	1		
6/7 0745		67	9.1	98	171	8.1	1.26[c]		11 / 0.48		0.0 / 0.00	93 / 1.52		5.2 / 0.15			0.1			118[e]	28	63	0	10		
7/5 1410		76	9.6	113	174	8.1	1.24[c]		12 / 0.52		2 / 0.07	91 / 1.49		8.0 / 0.23			0.2		Tot. Alk. 95	120[e]	30	62	0	2		
8/9 1225		77	11.0	131	166	8.1	1.16[c]		13 / 0.57		0.0 / 0.00	88 / 1.44		10 / 0.28			0.1			114[e]	33	58	0	5		
9/6 1335		69	10.4	114	200	8.1	13 / 0.65	8.9 / 0.73	17 / 0.74	2.5 / 0.06	0.0 / 0.00	109 / 1.79	9.0 / 0.19	6.2 / 0.17	1.0 / 0.02	0.1 / 0.01	0.1	39	Fe 0.04 Zn 0.02[d] PO_4 0.45	151[f]	34	69	0	25		
10/11 1245		58	9.0	88	188	7.5	1.42[c]		15 / 0.65		0.0 / 0.00	92 / 1.51		5.5 / 0.16			0.2			130[e]	31	71	0	6		
11/8 1430		51	10.8	96	236	7.5	1.40[c]		21 / 0.91		0.0 / 0.00	103 / 1.69		7.0 / 0.20			0.1			163[e]	39	70	0	8		
12/13 1335		38	13.2	99	263	7.9	1.62[c]		24 / 1.04		0.0 / 0.00	117 / 1.92		7.2 / 0.20			0.2			182[e]	39	81	0	12		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

KLAMATH RIVER NEAR HAPPY CAMP RESERVOIR SITE (STA. 2b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/5 1045	1,470	35	13.7	98	168	7.3	1.24[c]		14/0.61		0.0/0.00	86/1.41		6.8/0.19			0.1			117[e]	33	62	0	4		
2/9 1125	15,700	40	11.4	88	150	7.3	1.36[c]		7.5/0.33		0.0/0.00	74/1.21		5.2/0.15			0.1			105[e]	20	68	7	150		
3/8 1130	7,380	44	11.5	93	147	7.6	1.40[c]		8.2/0.36		0.0/0.00	86/1.41		4.5/0.13			0.0			103[e]	20	70	0	155		
4/12 0935	5,000 (est.)	53	10.5	96	232	7.7	1.80[c]		13/0.57		0.0/0.00	98/1.61		4.8/0.14			0.2			162[e]	24	90	10	10		
5/4 1000	3,420	53	10.5	96	249	7.7	19/0.95	8.0/0.66	17/0.74	4.1/0.10	0.0/0.00	96/1.57	36/0.75	4.8/0.14	0.3/0.00	0.1/0.01	0.1	22	Fe 0.06 Al 0.15 PO_4 0.10[d]	158[f]	30	79	0	2		
6/7 0855	6,020	62	9.0	92	147	7.7	1.22[c]		6.6/0.29		0.0/0.00	83/1.36		3.5/0.10			0.1			103[e]	19	61	0	25		
7/5 1310	1,150	76	8.8	104	184	8.1	1.48[c]		9.6/0.42		0.0/0.00	102/1.67		7.2/0.20			0.1			129[e]	22	74	0	1		
8/9 1305	1,570	77	9.4	112	185	8.1	1.30[c]		13/0.57		0.0/0.00	100/1.64		4.8/0.14			0.1			129[e]	30	65	0	10		
9/6 1220	860	70	10.3	114	203	8.1	14/0.70	9.0/0.74	16/0.70	2.1/0.05	0.0/0.00	114/1.87	8.0/0.17	6.7/0.19	0.0/0.00	0.3/0.02	0.3	31	Fe 0.02 Al 0.13 PO_4 0.35[d]	143[f]	32	72	0	10		
10/11 1325	2,250	59	9.1	89	189	7.7	1.28[c]		14/0.61		0.0/0.00	96/1.57		5.4/0.15			0.1			132[e]	32	64	0	10		
11/8 1330	2,000	52	10.9	99	233	7.5	1.44[c]		20/0.87		0.0/0.00	103/1.69		7.0/0.20			0.1			163[e]	38	72	0	6		
12/13 1415	2,370	40	12.9	99	251	7.9	1.62[c]		21/0.91		0.0/0.00	105/1.72		6.0/0.17			0.1			175[e]	36	81	0	30		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

KLAMATH RIVER NEAR KLAMATH (STA. 3)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/13 1245	6,780	41	12.1	95	153	7.4	1.40[c]		6.4 / 0.28		0.0 / 0.00	78 / 1.28		6.0 / 0.17			0.1			99[e]	17	70	6	4	Median 0.62	
2/11 1415	61,100	47	11.7	99	115	7.2	1.00[c]		2.7 / 0.12		0.0 / 0.00	60 / 0.98		3.5 / 0.10			0.0			74[e]	11	50	1		Maximum 620.	
3/10 0815	43,900	45	11.8	98	109	7.3	1.04[c]		2.6 / 0.11		0.0 / 0.00	58 / 0.95		3.5 / 0.10			0.0			70[e]	10	52	4	300	Minimum <0.045	
4/6 1555	33,000	54	10.5	97	108	7.3	1.02[c]		2.6 / 0.11		0.0 / 0.00	59 / 0.97		1.8 / 0.05			0.0			70[e]	10	51	3	60		
5/3 1015	14,400	55	8.6	82	134	7.3	13 / 0.65	7.2 / 0.59	3.8 / 0.17	0.7 / 0.02	0.0 / 0.00	73 / 1.20	8.0 / 0.17	2.5 / 0.07	0.0 / 0.00	0.1 / 0.01	0.0	18	Fe 0.03 PO4 0.05 Al 0.09 Cu 0.01 [d]	89[f]	12	62	2	7		
6/8 1440	20,000	62	9.3	95	97.0	7.3	0.90[c]		1.6 / 0.07		0.0 / 0.00	54 / 0.89		2.8 / 0.08			0.0			63[e]	7	45	1	25		
7/13 1610	4,700	71	9.3	104	146	7.9	1.28[c]		4.3 / 0.19		0.0 / 0.00	82 / 1.34		4.8 / 0.14			0.0			94[e]	13	64	0	1		
8/3 1330	3,710	72	9.0	102	168	7.9	1.46[c]		6.3 / 0.27		0.0 / 0.00	94 / 1.54		6.5 / 0.18			0.0			108[e]	16	73	0	1		
9/14 1520	3,080	69	9.9	109	188	8.1	20 / 1.00	6.6 / 0.54	8.9 / 0.39	1.3 / 0.03	0.0 / 0.00	101 / 1.66	1.0 / 0.02	9.2 / 0.26	0.5 / 0.01	0.1 / 0.01	0.0	25	Al 0.04 Zn 0.04 PO4 0.20 [d]	123[f]	20	77	0	3		
10/12 1355	4,240	60	11.3	112	191	7.9	1.52[c]		8.5 / 0.37		0.0 / 0.00	97 / 1.59		5.0 / 0.14			0.1			123[e]	20	76	0	4		
11/9 1430	3,680	54	10.7	99	205	7.7	1.64[c]		10 / 0.44		0.0 / 0.00	101 / 1.66		6.0 / 0.17			0.1			132[e]	21	82	0	1		
12/7 1250	11,500	44	12.2	99	177	7.6	1.44[c]		8.9 / 0.39		0.0 / 0.00	87 / 1.43		3.8 / 0.11			0.1			115[e]	21	72	1	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1
ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

KLAMATH RIVER AT SOMESBAR (STA. 2)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/14 1300	3,140	38	13.3	99	174	7.5[a]	1.40[c]		11 / 0.48		0.0 / 0.00	92 / 1.51		6.0 / 0.17			0.1			118[e]	26	70	0	3	Median 6.2	
2/12 1115	13,000	44	12.4	102	138	7.3[a]	1.20[c]		5.0 / 0.22		0.0 / 0.00	72 / 1.18		3.8 / 0.11			0.0			94[e]	15	60	1	60	Maximum 2,400.	
3/10 1505	15,200	45	12.2	102	127	7.3[a]	1.12[c]		4.1 / 0.18		0.0 / 0.00	64 / 1.05		2.5 / 0.07			0.1			86[e]	14	56	4	60	Minimum 0.23	
4/7 1325	16,600	52	10.8	98	119	7.4[a]	1.06[c]		4.2 / 0.18		0.0 / 0.00	40 / 0.66		2.8 / 0.08			0.0			81[e]	15	53	20	15		
5/2 1730	5,740	56	8.6	82	148	7.8[b]	13 / 0.65	6.9 / 0.57	5.7 / 0.25	1.3 / 0.03	0.0 / 0.00	76 / 1.25	9.0 / 0.19	3.0 / 0.08	0.0 / 0.00	0.1 / 0.01	0.0	19	Fe 0.01 PO$_4$ 0.05 Al 0.04 Cu 0.01 [d]	95[f]	17	61	0	1		
6/9 1235	8,420	59	9.9	97	89.8	7.3[a]	0.78[c]		1.9 / 0.08		0.0 / 0.00	50 / 0.82		1.6 / 0.05			0.0			61[e]	9	39	0	15		
7/14 1430	2,160	74	8.7	101	148	7.9[a]	1.26[c]		6.4 / 0.28		0.0 / 0.00	84 / 1.38		5.5 / 0.16			0.0			100[e]	18	63	0	1		
8/4 1415	1,800	74	8.7	101	168	8.1[a]	1.32[c]		9.1 / 0.40		0.0 / 0.00	94 / 1.54		4.0 / 0.11			0.1			114[e]	23	66	0	2		
9/15 1405	1,630	69	9.0	99	181	8.1[a]	16 / 0.80	7.3 / 0.60	12 / 0.52	2.1 / 0.05	0.0 / 0.00	96 / 1.57	9.0 / 0.19	7.5 / 0.21	1.1 / 0.02	0.2 / 0.01	0.2	33	Fe 0.01 Cu 0.01 Al 0.11 Zn 0.03 PO$_4$ 0.40 [d]	135[f]	26	70	0	5		
10/13 1245	2,640	57	10.5	100	187	7.7[a]	1.32[c]		13 / 0.57		0.0 / 0.00	96 / 1.57		5.2 / 0.15			0.1			127[e]	30	66	0	6		
11/10 1430	1,960	50	11.0	97	227	7.7[a]	1.50[c]		17 / 0.74		0.0 / 0.00	104 / 1.70		7.2 / 0.20			0.1			154[e]	33	75	0	10		
12/8 1220	6,420	40	13.1	101	204	7.7[a]	1.42[c]		14 / 0.61		0.0 / 0.00	95 / 1.56		4.8 / 0.14			0.0			138[e]	30	71	0	20		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE-B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

MAD RIVER NEAR ARCATA (STA. 6a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/13 1045	772	42	10.9	86	146	7.1	1.32[c]		4.7 / 0.20		0.0 / 0.00	60 / 0.98		7.0 / 0.20			0.1			90[e]	13	66	17	80	Median 22.	
2/11 1200	6,800	47	11.8	100	98.3	7.3	0.88[c]		2.9 / 0.13		0.0 / 0.00	42 / 0.69		6.2 / 0.17			0.1			61[e]	13	44	10	700	Maximum 7,000.	
3/10 1045	3,780	46	11.8	99	95.1	7.1	0.82[c]		2.6 / 0.11		0.0 / 0.00	42 / 0.69		4.8 / 0.14			0.0			59[e]	12	41	7	600	Minimum 0.21	
4/7 0920	1,150	55	10.0	94	120	7.3	1.14[c]		2.6 / 0.11		0.0 / 0.00	58 / 0.95		4.8 / 0.14			0.0			74[e]	9	57	9	60		
5/3 0700	800	55	9.7	91	129	7.3	18 / 0.90	3.4 / 0.28	3.2 / 0.14	0.8 / 0.02	0.0 / 0.00	70 / 1.15	4.0 / 0.08	3.5 / 0.10	0.4 / 0.01	0.0 / 0.00	0.1	9.6	Fe 0.06 Cu 0.01[d] Al 0.09 Zn 0.01 PO_4 0.05	77[f]	10	59	2	8		
6/8 1250	590	62	8.7	89	142	7.3	1.44[c]		3.6 / 0.16		0.0 / 0.00	78 / 1.28		7.5 / 0.21			0.0			87[e]	10	72	8	2		
7/14 0720	87	63	8.4	87	219	7.5	2.12[c]		4.6 / 0.20		0.0 / 0.00	124 / 2.03		2.5 / 0.07			0.0			135[e]	9	106	4	4		
8/4 0830	44	62	8.5	87	242	7.5	2.20[c]		6.0 / 0.26		0.0 / 0.00	136 / 2.23		3.8 / 0.11			0.1			149[e]	11	110	0	2		
9/15 0825	26	61	8.3	83	254	7.3	36 / 1.80	6.8 / 0.56	5.8 / 0.25	1.2 / 0.03	0.0 / 0.00	143 / 2.34	12 / 0.25	4.8 / 0.14	0.0 / 0.00	0.0 / 0.00	0.1	14	Al 0.01 Cu 0.01[d] PO_4 0.05	151[f]	9	118	1	1		
10/12 1145	37	60	9.6	96	262	7.5	38 / 1.90	7.5 / 0.62	5.8 / 0.25		0.0 / 0.00	139 / 2.28		6.0 / 0.17			0.0			161[e]	9	126	12	1		
11/9 1215	25	57	10.0	96	260	7.3	2.43[c]		6.9 / 0.30		0.0 / 0.00	137 / 2.25		14 / 0.39			0.1			160[e]	11	121	9	2		
12/7 1025	680	44	11.6	94	138	7.3	1.26[c]		4.7 / 0.20		0.0 / 0.00	64 / 1.05		3.5 / 0.10			0.1			85[e]	14	63	11	21		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

MATTOLE RIVER NEAR PETROLIA (STA. 7a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 1510	1,330	45	11.5	95	156	7.3	1.44[c]		6.4 / 0.28		0.0 / 0.00	58 / 0.95		6.0 / 0.17			0.1			94[e]	16	72	24	150	Median 2.3	
2/11 1000	15,700	50	10.8	95	98.2	7.3	0.80[c]		4.6 / 0.20		0.0 / 0.00	45 / 0.74		9.0 / 0.25			0.0			59[e]	20	40	3	1,200	Maximum 23.	
3/9 1205	4,450	51	10.6	95	108	7.3	0.88[c]		4.1 / 0.18		0.0 / 0.00	46 / 0.75		6.5 / 0.18			0.0			65[e]	17	44	6	850	Minimum <0.045	
4/6 1050	1,580	56	10.0	95	135	7.3	1.14[c]		4.5 / 0.20		0.0 / 0.00	58 / 0.95		6.0 / 0.17			0.1			81[e]	15	57	9	70		
5/4 0830	1,040	54	9.4	87	144	7.4	18 / 0.90	4.1 / 0.34	5.7 / 0.25	0.9 / 0.02	0.0 / 0.00	70 / 1.15	12 / 0.25	4.5 / 0.13	0.2 / 0.00	0.0 / 0.00	0.1	14	Fe 0.07 PO_4 0.10[d] Al 0.09	94[f]	17	62	5	20		
6/8 1015	790	62	9.4	96	154	7.3	1.28[c]		6.1 / 0.27		0.0 / 0.00	76 / 1.25		8.0 / 0.23			0.0			92[e]	17	64	2	5		
7/13 1040	137	72	10.9	124	201	8.1	1.82[c]		7.1 / 0.31		2 / 0.07	97 / 1.59		5.0 / 0.14			0.0		Tot. Alk. 101	120[e]	15	91	8	3		
8/3 0850	81	68	8.7	95	238	7.5	2.06[c]		8.4 / 0.37		0.0 / 0.00	124 / 2.03		5.0 / 0.14			0.1			143[e]	15	103	1	1		
9/14 1005	17	66	9.9	105	261	7.9	36 / 1.80	5.6 / 0.46	7.7 / 0.33	1.1 / 0.03	0.0 / 0.00	132 / 2.16	13 / 0.27	3.8 / 0.11	0.0 / 0.00	0.0 / 0.00	0.1	18	Al 0.01 Cu 0.01[d] PO_4 0.10	150[f]	13	113	5	1		
10/12 0930	76	58	10.0	97	260	7.5	36 / 1.80	6.3 / 0.52	8.4 / 0.37		0.0 / 0.00	114 / 1.87		5.0 / 0.14			0.0			156[e]	14	116	23	1		
11/9 0920	46	52	10.4	94	271	7.5	2.24[c]		9.7 / 0.42		0.0 / 0.00	122 / 2.00		14 / 0.39			0.1			162[e]	16	112	12	0.8		
12/7 0750	1,580	45	11.5	95	137	7.3	1.16[c]		6.4 / 0.28		0.0 / 0.00	58 / 0.95		4.2 / 0.12			0.0			82[e]	19	58	10	38		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1
ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

NAVARRO RIVER NEAR NAVARRO (STA. 8b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/11 1400	128	47	10.5	89	259	7.3	2.32[c]		13 / 0.57		0.0 / 0.00	132 / 2.16		11 / 0.31			0.2			158[e]	20	116	8	280	Median 0.62	
2/8 1630	18,000 (est.)	54	9.8	91	85.1	6.8	0.84[c]		4.9 / 0.21		0.0 / 0.00	38 / 0.62		9.0 / 0.25			0.0			52[e]	20	42	11	2,940	Maximum 2,400.	
3/7 1510	4,750 (est.)	55	10.1	95	98.2	7.2	0.76[c]		4.9 / 0.21		0.0 / 0.00	38 / 0.62		6.8 / 0.19			0.1			60[e]	22	38	7	850	Minimum <0.045	
4/4 1430	387	63	9.1	94	196	7.3	1.62[c]		8.7 / 0.38		0.0 / 0.00	96 / 1.57		9.8 / 0.28			0.3			120[e]	19	81	2	25		
5/6 1015	115	62	7.4	76	235	7.1	25 / 1.25	9.6 / 0.79	12 / 0.52	1.6 / 0.04	0.0 / 0.00	129 / 2.11	13 / 0.27	8.2 / 0.23	0.3 / 0.00	0.0 / 0.00	0.2	19	Fe 0.02 Al 0.04[d] PO_4 0.10	153[f]	20	102	0	1		
6/6 1300	76	66	9.2	98	248	7.5	2.06[c]		12 / 0.52		0.0 / 0.00	141 / 2.31		10 / 0.28			0.2			151[e]	20	103	0	1		
7/11 1520	32	74	10.6	123	258	7.7	2.18[c]		13 / 0.57		7 / 0.23	136 / 2.23		8.0 / 0.23			0.1			157[e]	21	109	0	4		
8/1 1330	20	73	10.2	117	263	7.3	2.40[c]		6.2 / 0.27		0.0 / 0.00	144 / 2.36		9.0 / 0.25			0.2			160[e]	10	120	2	1		
9/12 1410	5.0	72	10.2	116	266	7.5	26 / 1.30	11 / 0.90	12 / 0.52	1.5 / 0.04	0.0 / 0.00	151 / 2.47	5.0 / 0.10	7.5 / 0.21	0.2 / 0.00	0.0 / 0.00	0.2	20	Al 0.01 PO_4 0.10[d]	157[f]	19	110	0	2		
10/10 1300	15	59	10.4	103	280	7.3	27 / 1.35	11 / 0.93	13 / 0.57		0.0 / 0.00	147 / 2.41		10 / 0.28			0.1			171[e]	20	114	0	1		
11/7 1330	15	58	10.0	97	277	7.3	2.35[c]		14 / 0.61		0.0 / 0.00	150 / 2.46		14 / 0.39			0.2			169[e]	21	118	0	1		
12/5 1315	437	50	10.5	93	199	7.3	1.58[c]		9.7 / 0.42		0.0 / 0.00	95 / 1.56		8.0 / 0.23			0.1			121[e]	21	79	1	28		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1
ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

NOYO RIVER NEAR FORT BRAGG (STA. 10c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/11 1630	84	45	11.0	91	163	7.1	1.16[c]		11 / 0.48		0.0 / 0.00	68 / 1.11		12 / 0.34			0.3			112[e]	29	58	2	10	Median 1.3	
2/9 0800	3,380	51	10.1	90	77.9	7.0	0.60[c]		4.7 / 0.20		0.0 / 0.00	30 / 0.49		10 / 0.28			0.0			54[e]	25	30	5	140	Maximum 62.	
3/8 0710	1,940	50	10.5	93	85.7	7.0	0.04[c]		4.7 / 0.20		0.0 / 0.00	32 / 0.52		7.2 / 0.20			0.0			59[e]	24	32	6	500	Minimum 0.13	
4/4 1655	253	58	9.6	94	117	7.3	0.92[c]		6.2 / 0.27		0.0 / 0.00	52 / 0.85		8.0 / 0.23			0.0			80[e]	23	46	3	25		
5/6 0715	50	55	9.4	88	144	7.3	14 / 0.70	6.1 / 0.50	8.3 / 0.36	1.1 / 0.03	0.0 / 0.00	70 / 1.15	9.0 / 0.19	8.5 / 0.24	0.0 / 0.00	0.2 / 0.01	0.0	17	Fe 0.01 PO_4 0.05[d] Al 0.22 Cu 0.01	98[f]	23	60	3	15		
6/6 1500	47	63	9.5	98	148	7.3	1.12[c]		10 / 0.44		0.0 / 0.00	77 / 1.26		11 / 0.31			0.1			102[e]	28	56	0	1		
7/12 0700	13	62	8.2	84	161	7.3	1.30[c]		9.6 / 0.42		0.0 / 0.00	84 / 1.38		8.5 / 0.24			0.0			111[e]	24	65	0	5		
8/1 1600	7.0	66	9.6	103	161	7.3	1.15[c]		11 / 0.48		0.0 / 0.00	80 / 1.31		9.0 / 0.25			0.1			111[e]	29	58	0	2		
9/12 1740	4.8	65	8.7	92	168	7.3	14 / 0.70	6.1 / 0.50	10 / 0.44	1.3 / 0.03	0.0 / 0.00	86 / 1.41	1.0 / 0.02	8.5 / 0.24	0.2 / 0.00	0.1 / 0.01	0.1	18	Fe 0.02 Cu 0.01[d] PO_4 0.10	101[f]	26	60	0	2		
10/10 1500	8.9	55	9.2	87	172	7.1	15 / 0.75	6.0 / 0.49	11 / 0.48		0.0 / 0.00	83 / 1.36		10 / 0.28			0.1			118[e]	28	62	0	2		
11/7 1540	6.8	54	8.8	82	174	7.1	1.30[c]		12 / 0.52		0.0 / 0.00	85 / 1.39		9.7 / 0.27			0.2			120[e]	29	65	0	1		
12/5 1545	187	48	11.0	95	132	7.1	0.94[c]		8.1 / 0.35		0.0 / 0.00	62 / 1.02		7.5 / 0.21			0.1			91[e]	27	47	0	11		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

OUTLET CREEK NEAR LONGVALE (STA. 5b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 1520	281	41	10.8	84	Broken in Transit																					
2/9 1315	12,500	48	10.7	92	89.5	6.9	0.76[c]		3.1 / 0.13		0.0 / 0.00	18 / 0.30		7.2 / 0.20			0.0			54[e]	15	38	23	700		
3/8 1015	2,720	51	10.3	92	74.8	7.1	0.66[c]		2.8 / 0.12		0.0 / 0.00	30 / 0.49		4.5 / 0.13			0.0			45[e]	15	33	8	500		
4/5 0910	264	57	9.4	90	130	7.3	1.18[c]		4.9 / 0.21		0.0 / 0.00	67 / 1.10		5.2 / 0.15			0.2			78[e]	15	59	4	5		
5/5 0910	103	59	9.5	93	154	6.8	15 / 0.75	7.4 / 0.61	6.4 / 0.28	1.0 / 0.03	0.0 / 0.00	82 / 1.34	9.0 / 0.19	6.2 / 0.17	0.0 / 0.00	0.1 / 0.01	0.2	15	Fe 0.02 PO4 0.10[d] Al 0.05 As 0.01	100[f]	17	68	1	1		
6/7 0920	68	70	8.8	98	174	7.7	1.48[c]		6.1 / 0.27		0.0 / 0.00	94 / 1.54		4.8 / 0.14			0.4			104[e]	15	74	0	10		
7/12 0945	0.6	77	8.3	99	245	7.9	2.12[c]		10 / 0.44		0.0 / 0.00	140 / 2.29		9.8 / 0.28			1.1			147[e]	17	106	0	1		
8/2 0755	2.0	72	7.0	80	265	7.7	2.20[c]		13 / 0.57		0.0 / 0.00	144 / 2.36		16 / 0.45			1.1			159[e]	21	110	0	1		
9/13 0830	1.3	68	8.6	94	282	8.1	29 / 1.45	11 / 0.93	14 / 0.61	1.6 / 0.04	4 / 0.13	138 / 2.26	1.0 / 0.02	22 / 0.62	0.0 / 0.00	0.1 / 0.01	1.8	12	Al 0.02 PO4 0.00[d] Tot. Alk. 146	164[f]	20	119	0	1		
10/11 0920	2.6	56	9.1	86	316	7.7	2.54[c]		13 / 0.57		0.0 / 0.00	150 / 2.46		22 / 0.62			1.9			190[e]	18	127	4	13		
11/8 0850	3.0	54	9.1	84	360	7.5	2.98[c]		17 / 0.74		0.0 / 0.00	168 / 2.75		26 / 0.73			2.1			216[e]	20	149	11	1		
12/6 0735	245	42	11.9	94	129	8.1	1.04[c]		6.0 / 0.26		0.0 / 0.00	60 / 0.98		5.0 / 0.14			0.2			77[e]	20	52	3	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

REDWOOD CREEK AT ORICK (STA. 3b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH [a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform [h] MPN/ml	Analyzed by [i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/13 1150	628	42	11.6	92	104	7.3	—/0.92[c]		3.7/0.16		0.0/0.00	40/0.66		7.0/0.20			0.0			62[e]	15	46	13	9	Median 6.2	
2/11 1300	4,380	48	11.3	97	68.6	7.0	—/0.56[c]		2.6/0.11		0.0/0.00	22/0.36		6.8/0.19			0.0			41[e]	16	28	10	500	Maximum 2,400.	
3/9 1530	3,420	49	11.2	98	73.6	7.1	—/0.56[c]		2.7/0.12		0.0/0.00	24/0.39		6.5/0.18			0.0			44[e]	18	28	8	550	Minimum 0.62	
4/6 1450	1,220	57	9.6	92	83.0	7.2	—/0.72[c]		2.7/0.12		0.0/0.00	35/0.57		4.5/0.13			0.0			49[e]	14	36	7	120		
5/3 0845	316	53	10.5	96	92.5	7.1	12/0.60	2.7/0.22	3.1/0.13	0.4/0.01	0.0/0.00	42/0.69	8.0/0.17	4.2/0.12	0.0/0.00	0.0/0.00	0.0	11	Fe 0.09 PO_4 0.05 Al 0.08 [d]	62[f]	14	41	7	6		
6/8 1350	563	64	9.1	95	91.4	7.3	—/0.75[c]		2.3/0.10		0.0/0.00	40/0.66		5.4/0.15			0.0			54[e]	12	37	4	25		
7/13 1445	128	66	9.0	96	128	7.3	—/1.12[c]		3.5/0.15		0.0/0.00	61/1.00		10/0.28			0.0			76[e]	12	56	6	1		
8/3 1230	76	63	9.3	96	139	7.1	—/1.20[c]		5.2/0.23		0.0/0.00	66/1.08		10/0.28			0.0			82[e]	16	60	6	2		
9/14 1350	30	63	9.2	95	148	7.3	24/1.20	1.0/0.08	5.1/0.22	0.6/0.02	0.0/0.00	71/1.16	5.0/0.10	10/0.28	0.2/0.00	0.1/0.01	0.0	13	Fe 0.10 Zn 0.03 PO_4 0.00 [d]	94[f]	14	64	6	1		
10/12 1240	30	61	9.8	98	156	7.1	—/1.26[c]		5.1/0.22		0.0/0.00	67/1.10		6.8/0.19			0.0			92[e]	15	63	8	6		
11/9 1340	26	56	10.7	102	151	7.3	—/1.28[c]		4.6/0.20		0.0/0.00	67/1.10		7.0/0.20			0.0			89[e]	14	64	9	1		
12/7 1200	1,010	46	11.5	96	89.8	7.1	—/0.74[c]		3.4/0.15		0.0/0.00	38/0.62		4.0/0.11			0.0			53[e]	17	37	6	30		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

RUSSIAN RIVER, EAST FORK AT POTTER VALLEY POWERHOUSE (STA. 10a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/14 0900	43	38	12.2	94	232	7.3	1.94[c]		12 / 0.52		0.0 / 0.00	115 / 1.88		9.0 / 0.25			1.4			139[e]	21	97	3	20	Median 2.3	
2/3 1700	299	45	10.7	91	129	7.2	1.28[c]		4.5 / 0.20		0.0 / 0.00	65 / 1.07		8.0 / 0.23			0.3			77[e]	14	64	11	70	Maximum 62.	
3/10 1315	298	47	10.9	95	101	7.3	0.88[c]		2.7 / 0.12		0.0 / 0.00	46 / 0.75		3.2 / 0.09			0.2			61[e]	12	44	6	500	Minimum 0.23	
4/14 1310	300	53	10.0	95	125	7.3	1.08[c]		3.4 / 0.15		0.0 / 0.00	64 / 1.05		3.0 / 0.08			0.3			75[e]	12	54	2	60		
5/11 1040	195	58	9.2	93	139	7.3	17 / 0.85	5.0 / 0.41	6.0 / 0.26	0.9 / 0.02	0.0 / 0.00	78 / 1.28	8.0 / 0.17	3.5 / 0.10	0.2 / 0.00	0.0 / 0.00	0.3	13	Fe 0.08 PO_4 0.05[d] Al 0.13 Cu 0.01	92[f]	17	63	0	20		
6/14 1605	134	68	8.1	91	146	7.5	1.32[c]		4.2 / 0.18		0.0 / 0.00	80 / 1.31		4.8 / 0.14			0.3			88[e]	12	66	0	10		
7/13 1445	298	62	9.2	97	136	7.5	1.30[c]		3.6 / 0.16		0.0 / 0.00	78 / 1.28		4.5 / 0.13			0.1			82[e]	11	65	1	8		
8/4 1130	79	67	8.2	91	141	7.5	1.24[c]		4.7 / 0.20		0.0 / 0.00	77 / 1.26		3.2 / 0.09			0.3			85[e]	14	62	0	3		
9/14 1205	103	64	8.8	95	149	7.5	17 / 0.85	6.0 / 0.49	5.7 / 0.25	0.6 / 0.02	0.0 / 0.00	86 / 1.41	6.0 / 0.12	3.0 / 0.08	0.0 / 0.00	0.1 / 0.01	0.3	14	Fe 0.01 Cu 0.01[d] Al 0.07 PO_4 0.05	95[f]	16	67	0	8		
10/12 1420	245	62	9.1	96	164	7.5	19 / 0.95	6.0 / 0.49	5.4 / 0.23		0.0 / 0.00	90 / 1.48		3.5 / 0.10			0.2			98[e]	14	72	0	1		
11/3 1235	307	56	9.5	93	174	7.5	1.56[c]		5.6 / 0.24		0.0 / 0.00	95 / 1.56		5.5 / 0.16			0.4			104[e]	13	78	0	4		
12/7 1300	303	44	11.2	94	144	7.3	1.22[c]		5.3 / 0.23		0.0 / 0.00	72 / 1.18		3.8 / 0.11			0.4			86[e]	16	61	2	49		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

RUSSIAN RIVER AT GUERNEVILLE (STA. 10)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/11 1025	413	50	9.8	87	268	7.4	2.26[c]		15 / 0.65		0.0 / 0.00	132 / 2.16		13 / 0.37			0.4			159[e]	22	113	5	30	Median 23.	
2/8 0940	50,400	55	9.1	86	85.8	7.2	0.80[c]		2.9 / 0.13		0.0 / 0.00	41 / 0.67		5.0 / 0.14			0.0			51[e]	14	40	6	2,800	Maximum 7,000.	
3/7 0950	16,300	55	9.5	89	139	7.3	1.16[c]		4.9 / 0.21		0.0 / 0.00	64 / 1.05		6.2 / 0.17			0.1			83[e]	15	58	6	700	Minimum 0.62	
4/4 0945	1,690	63	8.6	89	228	7.5	2.14[c]		7.1 / 0.31		0.0 / 0.00	124 / 2.03		7.5 / 0.21			0.3			136[e]	13	107	5	50		
5/9 1320	648	70	7.9	88	253	7.1	23 / 1.15	14 / 1.17	8.7 / 0.38	1.5 / 0.04	0.0 / 0.00	144 / 2.36	13 / 0.27	6.2 / 0.17	1.0 / 0.02	0.0 / 0.00	0.4	16	Fe 0.02 PO_4 0.15[d] Al 0.06 Cu 0.01	155[f]	14	116	0	5		
6/6 0900	383	71	7.6	86	259	7.5	2.38[c]		8.4 / 0.37		0.0 / 0.00	150 / 2.46		8.0 / 0.23			0.4			154[e]	13	119	0	1		
7/11 0935	205	72	8.1	92	264	7.9	2.44[c]		6.8 / 0.30		6 / 0.20	144 / 2.36		5.5 / 0.16			0.3			157[e]	11	122	0	8		
8/1 0915	175 (est.)	72	8.0	91	262	7.5	2.32[c]		8.9 / 0.39		0.0 / 0.00	146 / 2.39		6.0 / 0.17			0.4			156[e]	14	116	0	4		
9/15 0800	170	70	8.1	90	263	7.5	24 / 1.20	15 / 1.22	10 / 0.44	1.1 / 0.03	0.0 / 0.00	153 / 2.51	11 / 0.23	5.0 / 0.14	0.0 / 0.00	0.0 / 0.00	0.4	18	Al 0.09 PO_4 0.05[d]	160[f]	15	121	0	15		
10/13 0925	222	61	9.6	97	257	7.7	24 / 1.20	13 / 1.08	9.7 / 0.42		0.0 / 0.00	140 / 2.29		8.0 / 0.23			0.4			153[e]	16	114	0	1		
11/4 0810	255	58	9.1	89	244	7.3	2.16[c]		8.9 / 0.39		2 / 0.07	127 / 2.08		5.5 / 0.16			0.4			145[e]	15	108	1	3		
12/8 0855	1,110	47	10.1	86	264	7.3	2.28[c]		9.3 / 0.40		0.0 / 0.00	65 / 1.07		7.2 / 0.20			0.4			157[e]	15	114	61	18		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

RUSSIAN RIVER NEAR HEALDSBURG (STA. 9)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/14 1330	300	47	11.2	95	253	7.3	2.40[c]		8.7 / 0.38		0.0 / 0.00	130 / 2.13		6.0 / 0.17			0.4			149[e]	14	120	13	100	Median 6.2	
2/4 1000	2,440	50	10.1	89	180	7.3	1.66[c]		6.4 / 0.28		0.0 / 0.00	91 / 1.49		8.0 / 0.23			0.1			106[e]	14	83	8	70	Maximum 2,400.	
3/10 1605	3,920	54	10.3	96	182	7.3	1.60[c]		5.3 / 0.23		0.0 / 0.00	92 / 1.51		5.5 / 0.16			0.2			107[e]	13	80	5	500	Minimum 0.06	
4/14 1540	1,030	62	9.8	100	214	7.8	1.96[c]		6.1 / 0.27		0.0 / 0.00	116 / 1.90		6.0 / 0.17			0.3			126[e]	12	98	3	25		
5/9 1515	630	72	10.4	119	233	7.0	23 / 1.15	13 / 1.03	7.3 / 0.32	1.3 / 0.03	0.0 / 0.00	135 / 2.21	11 / 0.23	5.0 / 0.14	1.1 / 0.02	0.0 / 0.00	0.3	15	Fe 0.02 PO_4 0.05[d] Al 0.06 Cu 0.01	144[f]	13	109	0	12		
6/15 0720	205 (est.)	76	7.7	91	257	7.9	2.44[c]		7.5 / 0.33		0.0 / 0.00	149 / 2.44		6.8 / 0.19			0.5			152[e]	12	122	0	2		
7/14 0845	200	70	7.5	84	246	7.5	2.36[c]		7.4 / 0.32		0.0 / 0.00	146 / 2.39		4.0 / 0.11			0.4			145[e]	12	118	0	4		
8/4 1345	210	73	8.8	101	234	7.7	2.07[c]		8.0 / 0.35		0.0 / 0.00	134 / 2.20		4.8 / 0.14			0.3			138[e]	14	103	0	2		
9/14 1520	195	71	8.6	97	248	7.9	23 / 1.15	13 / 1.11	9.8 / 0.43	1.0 / 0.03	0.0 / 0.00	143 / 2.34	9.0 / 0.19	4.8 / 0.14	0.0 / 0.00	0.1 / 0.01	0.5	17	Al 0.07 PO_4 0.00[d]	148[f]	16	113	0	10		
10/13 0725	227	61	8.6	87	234	7.5	23 / 1.15	12 / 0.97	7.7 / 0.33		0.0 / 0.00	130 / 2.13		5.5 / 0.16			0.4			138[e]	13	106	0	4		
11/3 1645	281	58	9.9	97	227	7.5	2.03[c]		7.7 / 0.33		0.0 / 0.00	124 / 2.03		10 / 0.28			0.4			134[e]	14	101	0	2		
12/7 1510	962	51	10.5	94	258	7.6	2.16[c]		9.0 / 0.39		0.0 / 0.00	116 / 1.90		5.2 / 0.15			0.4			152[e]	15	108	13	18		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

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TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

RUSSIAN RIVER NEAR HOPLAND (STA. 8a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1960																										USGS
1/14 1110	193	42	10.6	86	223	7.3	1.94[c]		12 / 0.52		0.0 / 0.00	118 / 1.93		10 / 0.28			0.7			132[e]	21	97	0	5	Median 23.	
2/4 0850	782	49	9.8	87	145	7.3	1.32[c]		6.6 / 0.29		0.0 / 0.00	68 / 1.11		9.0 / 0.25			0.1			86[e]	18	66	10	175	Maximum 7,000.	
3/10 1425	1,560	52	9.9	92	162	7.3	1.40[c]		5.6 / 0.24		0.0 / 0.00	78 / 1.28		6.2 / 0.17			0.2			96[e]	15	70	6	350	Minimum 0.23	
4/14 1420	716	59	10.0	101	162	7.3	1.42[c]		5.1 / 0.22		0.0 / 0.00	82 / 1.34		4.8 / 0.14			0.2			96[e]	13	71	4	50		
5/11 1300	349	63	10.2	108	168	7.5	18 / 0.90	7.5 / 0.62	5.7 / 0.25	1.2 / 0.03	0.0 / 0.00	93 / 1.52	9.0 / 0.19	4.5 / 0.13	1.3 / 0.02	0.0 / 0.00	0.3	12	Fe 0.06 PO_4 0.10[d] Al 0.11 Cu 0.01	106[f]	14	76	0	8		
6/14 1800	183	72	9.3	108	180	7.7	1.58[c]		6.0 / 0.26		0.0 / 0.00	97 / 1.59		7.0 / 0.20			0.3			106[e]	14	79	0	1		
7/14 0700	227	61	8.0	82	170	7.3	1.62[c]		5.4 / 0.23		0.0 / 0.00	92 / 1.51		6.0 / 0.17			0.1			100[e]	12	81	6	5		
8/4 1230	217	68	9.1	102	172	7.5	1.20[c]		14 / 0.61		0.0 / 0.00	96 / 1.57		4.5 / 0.13			0.3			101[e]	34	60	0	2		
9/14 1345	193	70	9.5	108	183	7.7	17 / 0.85	9.6 / 0.79	8.0 / 0.35		0.0 / 0.00	104 / 1.70	8.0 / 0.17	4.0 / 0.11	0.6 / 0.01	0.0 / 0.00	0.3	14	Al 0.07 Zn 0.05[d] PO_4 0.05	114[f]	17	82	0	15		
10/12 1550	248	67	9.4	103	183	7.5	19 / 0.95	8.6 / 0.71	6.4 / 0.28		0.0 / 0.00	97 / 1.59		3.5 / 0.10			0.2			108[e]	14	83	3	1		
11/3 1440	314	59	9.7	98	183	7.3	1.62[c]		8.0 / 0.25	1.0 / 0.03	0.0 / 0.00	100 / 1.64		8.8 / 0.25			0.4			108[e]	18	81	0	2		
12/7 1400	297	50	10.0	90	217	7.2	1.90[c]		10 / 0.44		0.0 / 0.00	108 / 1.77		6.5 / 0.18			0.4			128[e]	19	95	6	28		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

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TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

SALMON RIVER AT SOMESBAR (STA. 2a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/14 1345	270	38	13.1	98	124	7.4	1.24[c]		3.0 / 0.13		0.0 / 0.00	66 / 1.08		3.0 / 0.08			0.0			86[e]	9	62	8	1	Median 0.23	
2/12 1150	2,700	43	12.3	99	94.7	7.3	0.88[c]		1.8 / 0.08		0.0 / 0.00	46 / 0.75		1.8 / 0.05			0.0			66[e]	8	44	6	35	Maximum 23.	
3/10 1545	3,630	43	12.2	98	89.1	7.3	0.84[c]		1.4 / 0.06		0.0 / 0.00	44 / 0.72		2.0 / 0.06			0.0			62[e]	7	42	6	35	Minimum 0.06	
4/7 1355	4,830	50	10.9	97	68.6	7.3	0.66[c]		1.2 / 0.05		0.0 / 0.00	40 / 0.66		0.8 / 0.02			0.0			48[e]	7	33	0	3		
5/2 1650	5,740	53	8.5	78	84.8	7.7	11 / 0.55	3.5 / 0.29	1.3 / 0.06	0.7 / 0.02	0.0 / 0.00	51 / 0.84	4.0 / 0.08	0.8 / 0.02	0.0 / 0.00	0.1 / 0.01	0.0	17	Al 0.05 Cu 0.01[d] PO_4 0.05	63[f]	7	42	0	1		
6/9 1310	2,950	56	10.1	96	63.0	7.3	0.62[c]		0.4 / 0.02		0.0 / 0.00	35 / 0.57		2.1 / 0.06			0.0			44[e]	3	31	2	10		
7/14 1535	456	71	8.7	98	104	7.7	1.00[c]		3.0 / 0.13		0.0 / 0.00	62 / 1.02		4.2 / 0.12			0.0			72[e]	12	50	0	1		
8/4 1345	258	74	8.8	101	121	7.9	1.14[c]		2.9 / 0.13		0.0 / 0.00	72 / 1.18		2.5 / 0.07			0.1			84[e]	10	57	0	1		
9/15 1505	157	68	9.9	108	138	8.1	20 / 1.00	3.4 / 0.28	3.3 / 0.14	0.8 / 0.02	3 / 0.10	74 / 1.21	0.0 / 0.00	5.0 / 0.14	0.1 / 0.00	0.1 / 0.01	0.0	17	Tot. Alk. 80 PO_4 0.05 Zn 0.02[d]	89[f]	10	64	0	1		
10/13 1315	178	56	10.9	104	138	7.9	1.24[c]		3.2 / 0.14		0.0 / 0.00	73 / 1.20		2.8 / 0.08			0.0			96[e]	10	62	2	3		
11/10 1345	166	50	11.6	102	140	7.7	1.30[c]		2.9 / 0.13		0.0 / 0.00	76 / 1.25		2.5 / 0.07			0.1			97[e]	9	65	3	1		
12/8 1150	800 (est.)	39	12.9	98	107	7.3	1.00[c]		2.3 / 0.10		0.0 / 0.00	57 / 0.93		1.0 / 0.03			0.0			74[e]	9	50	3	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

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TABLE B - 1
ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

SCOTT RIVER NEAR FORT JONES (STA. 1b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/5 1210	58	33	13.2	92	267	7.5	2.76[c]		4.5 / 0.20		0.0 / 0.00	160 / 2.62		4.0 / 0.11			0.0			169[e]	7	138	7	4	Median 2.3	
2/9 1400	5,520	39	10.8	82	111	7.1	1.06[c]		2.1 / 0.09		0.0 / 0.00	52 / 0.85		8.0 / 0.23			0.0			70[e]	8	53	10	125	Maximum 230.	
3/8 1410	2,240	45	10.9	90	129	7.4	1.30[c]		1.9 / 0.08		0.0 / 0.00	72 / 1.18		1.5 / 0.04			0.0			82[e]	6	65	6	110	Minimum 0.23	
4/12 1135	1,050	49	10.6	92	122	7.3	1.24[c]		1.6 / 0.07		0.0 / 0.00	73 / 1.20		1.8 / 0.05			0.0			77[e]	5	62	2	10		
5/4 0810	496	49	10.2	89	162	7.3	14 / 0.70	11 / 0.89	2.6 / 0.11	1.2 / 0.03	0.0 / 0.00	95 / 1.56	5.8 / 0.12	0.8 / 0.02	0.7 / 0.01	0.0 / 0.00	0.0	17	Fe 0.08 Pb 0.01 Al 0.04 Zn 0.02 PO_4 0.00 [d]	100[f]	6	79	1	3		
6/7 1150	1,240	60	9.1	91	99.1	7.3	0.92[c]		1.5 / 0.07		0.0 / 0.00	58 / 0.95		1.8 / 0.05			0.0			63[e]	7	46	0	25		
7/5 1140	135	69	10.1	111	241	7.9	2.50[c]		3.6 / 0.16		0.0 / 0.00	153 / 2.51		5.5 / 0.16			0.0			153[e]	6	125	0	1		
8/9 1425	67	77	10.6	126	269	8.1	2.70[c]		5.0 / 0.22		0.0 / 0.00	175 / 2.87		3.2 / 0.09			0.0			170[e]	8	135	0	1		
9/6 1040	50	64	11.4	118	270	7.9	28 / 1.40	15 / 1.24	6.0 / 0.26	0.6 / 0.02	0.0 / 0.00	168 / 2.75	6.0 / 0.12	2.5 / 0.07	1.3 / 0.02	0.0 / 0.00	0.0	21	Fe 0.01 Zn 0.01 Al 0.08 PO_4 0.00 [d]	163[f]	9	132	0	10		
10/11 1515	73	58	9.0	88	304	7.5	2.78[c]		5.4 / 0.23		0.0 / 0.00	176 / 2.88		4.2 / 0.12			0.0			192[e]	8	139	0	1		
11/8 1200	64	50	11.7	103	271	7.8	2.64[c]		4.2 / 0.18		0.0 / 0.00	164 / 2.69		3.5 / 0.10			0.0			172[e]	6	132	0	1		
12/13 1525	214	45	10.9	90	205	7.3	2.04[c]		3.9 / 0.17		0.0 / 0.00	118 / 1.93		2.0 / 0.06			0.0			130[e]	8	102	5	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

SHASTA RIVER NEAR YREKA (STA. 1a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/5 0805	152	32	13.8	95	464	7.7	3.58[c]		37 / 1.61		0.0 / 0.00	268 / 4.39		23 / 0.65			0.5			314[e]	31	179	0	3	Median 6.2	
2/9 0930	1,720	42	9.6	76	474	7.9	3.28[c]		40 / 1.74		0.0 / 0.00	242 / 3.97		14 / 0.39			0.5			320[e]	35	164	0	125	Maximum 130.	
3/8 0745	434	45	10.9	90	423	7.9	3.18[c]		32 / 1.39		0.0 / 0.00	244 / 4.00		18 / 0.51			0.6			284[e]	30	159	0	300	Minimum 0.62	
4/11 1610	106	59	9.6	94	559	8.2	4.60[c]		46 / 2.00		20 / 0.67	303 / 4.97		23 / 0.65			0.6		Tot. Alk. 344	376[e]	30	230	0	4		
5/4 1230	114	60	9.6	96	587	8.1	34 / 1.70	36 / 2.94	46 / 2.00	5.5 / 0.14	13 / 0.43	321 / 5.26	12 / 0.25	28 / 0.79	0.3 / 0.00	0.4 / 0.02	0.6	49	Tot. Alk. 347; Fe 0.04; PO_4 1.50[d]; Al 0.27; Zn 0.01	383[f]	29	232	0	3		
6/7 0610	54	64	8.3	87	603	7.9	4.68[c]		47 / 2.04		12 / 0.40	351 / 5.75		17 / 0.48			0.7		Tot. Alk. 375	406[e]	30	234	0	10		
7/5 1500	9.5	85	8.8	114	673	8.1	5.80[c]		56 / 2.44		42 / 1.40	337 / 5.52		44 / 1.24			0.7		Tot. Alk. 422	454[e]	30	290	0	2		
8/9 1135	17	78	8.7	105	717	8.1	5.50[c]		59 / 2.57		25 / 0.83	396 / 6.49		22 / 0.62			0.9		Tot. Alk. 447	483[e]	32	275	0	3		
9/6 1440	34	73	8.2	94	708	8.1	41 / 2.05	43 / 3.55	63 / 2.74	4.6 / 0.12	27 / 0.90	376 / 6.16	12 / 0.25	45 / 1.27	0.8 / 0.01	0.3 / 0.02	0.8	57	Tot. Alk. 431; Fe 0.03; PO_4 0.50[d]; Al 0.09	480[f]	32	280	0	20		
10/11 1145	120	54	9.9	92	553	7.9	4.20[c]		38 / 1.65		12 / 0.40	288 / 4.72		26 / 0.73			0.4			372[e]	28	210	0	8		
11/8 1530	146	52	10.4	94	502	8.1	4.00[c]		29 / 1.26		25 / 0.83	222 / 3.64		22 / 0.62			0.4		Tot. Alk. 273	338[e]	24	200	0	1		
12/13 1245	179	42	11.9	94	536	8.1	4.08[c]		43 / 1.87		10 / 0.33	274 / 4.49		26 / 0.73			0.5		Tot. Alk. 294	362[e]	31	204	0	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

SMITH RIVER NEAR CRESCENT CITY (STA. 3a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/13 1400	2,830	42	12.4	98	104	7.3	1.08[c]		2.0 / 0.09		0.0 / 0.00	60 / 0.98		3.0 / 0.08			0.0			65[e]	8	54	5	3	Median 0.23	
2/11 1540	12,900	47	12.5	106	77.1	7.3	0.76[c]		1.4 / 0.06		0.0 / 0.00	36 / 0.59		4.5 / 0.13			0.0			48[e]	7	38	8	50	Maximum 6.2	
3/10 0700	12,800	44	12.8	104	78.3	7.2	0.80[c]		1.5 / 0.07		0.0 / 0.00	38 / 0.62		4.0 / 0.11			0.0			49[e]	8	40	9	35	Minimum <0.045	
4/6 1725	4,960	52	11.2	101	78.0	7.3	0.74[c]		1.3 / 0.06		0.0 / 0.00	44 / 0.72		2.5 / 0.07			0.0			49[e]	8	37	1	4		
5/3 1145	2,500	52	11.8	107	91.0	7.3	4.4 / 0.22	8.3 / 0.68	1.4 / 0.06	0.3 / 0.01	0.0 / 0.00	56 / 0.92	1.0 / 0.02	2.0 / 0.06	0.0 / 0.00	0.1 / 0.01	0.0	18	Fe 0.01 Cu 0.01[d] Al 0.02 As 0.01 PO_4 0.00	64[f]	6	45	0	1		
6/8 1630	2,080	60	9.9	99	93.9	7.4	0.91[c]		1.3 / 0.06		0.0 / 0.00	54 / 0.89		2.7 / 0.08			0.0			59[e]	6	46	2	10		
7/13 1820	570	66	9.7	103	117	7.9	1.20[c]		1.9 / 0.08		0.0 / 0.00	71 / 1.16		4.5 / 0.13			0.0			73[e]	6	60	2	1		
8/4 0600	390	67	8.6	93	128	7.5	1.32		2.5 / 0.11		0.0 / 0.00	76 / 1.25		4.5 / 0.13			0.1			80[e]	8	66	4	1		
9/14 1815	285	63	9.8	101	138	7.5	9.2 / 0.46	12 / 0.96	2.4 / 0.10	0.4 / 0.01	0.0 / 0.00	83 / 1.36	0.0 / 0.00	7.5 / 0.21	0.2 / 0.00	0.0 / 0.00	0.0	16	PO_4 0.00 Zn 0.03[d]	89[f]	7	71	3	1		
10/12 1605	262	54	10.6	98	137	7.5	1.30[c]		2.2 / 0.10		0.0 / 0.00	75 / 1.23		2.5 / 0.07			0.0			86[e]	7	65	3	6		
11/9 1630	248	51	10.9	97	139	7.5	1.34[c]		2.5 / 0.11		0.0 / 0.00	80 / 1.31		2.8 / 0.08			0.0			87[e]	8	67	1	1		
12/7 1455	2,690	44	12.6	102	95.2	7.4	0.92[c]		2.1 / 0.09		0.0 / 0.00	54 / 0.89		4.2 / 0.12			0.0			60[e]	9	46	2	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

TRINITY RIVER NEAR BURNT RANCH (STA. 4b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/14 1600	550	37	12.8	94	193	7.5[a]	1.80[c]		7.1 / 0.31		0.0 / 0.00	96 / 1.57		11 / 0.31			0.0			123[e]	15	90	11	2		
2/12 1400	5,790	42	11.5	91	115	7.3[a]	1.08[c]		2.6 / 0.11		0.0 / 0.00	60 / 0.98		3.0 / 0.08			0.0			73[e]	9	54	5	85		
3/10 0900	6,880	44	11.7	95	111	7.3[a]	1.10[c]		2.1 / 0.09		0.0 / 0.00	62 / 1.02		2.5 / 0.07			0.1			71[e]	8	55	4	70		
4/7 1650	6,830	53	10.4	97	88.5	7.3[a]	0.84[c]		1.6 / 0.07		0.0 / 0.00	51 / 0.84		1.5 / 0.04			0.0			57[e]	8	42	0	25		
5/2 1130	3,070	55	8.8	83	109	7.8[b]	10 / 0.50	7.1 / 0.58	2.1 / 0.09	0.4 / 0.01	0.0 / 0.00	66 / 1.08	2.0 / 0.04	2.0 / 0.06	0.0 / 0.00	0.1 / 0.01	0.0	17	Fe 0.04 Cu 0.01[d] Al 0.04 PO_4 0.00	74[f]	8	54	0	20		
6/9 1550	4,470	61	9.1	92	79.2	7.3[a]	0.76[c]		0.7 / 0.03		0.0 / 0.00	44 / 0.72		2.2 / 0.06			0.0			50[e]	4	38	2	70		
7/14 1905	821	77	8.0	95	132	7.9[a]	1.22[c]		3.3 / 0.14		4 / 0.13	67 / 1.10		5.8 / 0.16			0.0		Tot. Alk. 75	84[e]	10	61	0	2		
8/5 0635	374	71	7.8	88	169	7.9[a]	1.52[c]		4.9 / 0.21		0.0 / 0.00	92 / 1.51		5.0 / 0.14			0.0			107[e]	12	76	1	1		
9/15 1820	198	70	8.6	96	210	7.8[a]	22 / 1.10	9.7 / 0.80	6.3 / 0.27	0.8 / 0.02	0.0 / 0.00	113 / 1.85	0.0 / 0.00	12 / 0.34	0.2 / 0.00	0.0 / 0.00	0.1	17	PO_4 0.00[d]	124[f]	12	95	2	1		
10/13 1600	298	58	10.0	97	200	7.9[a]	1.76[c]		5.8 / 0.25		0.0 / 0.00	102 / 1.67		8.6 / 0.24			0.1			127[e]	12	88	4	10		
11/11 0855	281	52	10.0	90	206	7.3[a]	1.84[c]		5.9 / 0.26		0.0 / 0.00	102 / 1.67		8.8 / 0.25			0.0			131[e]	12	92	8	2		
12/8 1520	1,470	40	12.3	95	129	7.3[a]	1.16[c]		4.0 / 0.17		0.0 / 0.00	65 / 1.07		4.2 / 0.12			0.0			82[e]	13	58	5	60		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

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TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

TRINITY RIVER NEAR HOOPA (STA. 4)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/14 1125	1,160	39	12.5	95	198	7.5	1.96[c]		5.6 / 0.24		0.0 / 0.00	102 / 1.67		9.0 / 0.25			0.1			123[e]	11	98	14	3	Median 2.7	
2/12 0955	18,500	45	12.0	99	124	7.3	1.24[c]		2.4 / 0.10		0.0 / 0.00	64 / 1.05		3.8 / 0.11			0.0			76[e]	7	62	10	140	Maximum 620.	
3/10 1310	15,400	46	11.6	97	117	7.4	1.16[c]		2.0 / 0.09		0.0 / 0.00	66 / 1.08		3.0 / 0.08			0.0			73[e]	7	58	4	250	Minimum <0.045	
4/7 1130	10,600	53	10.6	97	112	7.3	1.04[c]		3.9 / 0.17		0.0 / 0.00	62 / 1.02		3.0 / 0.08			0.0			70[e]	14	52	1	50		
5/2 1430	5,100	63	9.9	102	130	7.1	14 / 0.70	7.3 / 0.60	2.2 / 0.10	0.4 / 0.01	0.0 / 0.00	77 / 1.26	6.0 / 0.12	2.0 / 0.06	0.0 / 0.00	0.2 / 0.01	0.0	19	Fe 0.05 PO4 0.05 Al 0.08 Cu 0.01 [d]	89[f]	7	65	2	15		
6/9 1050	6,440	62	9.3	95	100	7.3	0.99[c]		1.3 / 0.06		0.0 / 0.00	58 / 0.95		3.3 / 0.09			0.0			61[e]	6	50	2	70		
7/14 1000	1,300	71	9.0	101	156	7.7	1.48[c]		3.1 / 0.13		0.0 / 0.00	89 / 1.46		5.8 / 0.16			0.0			97[e]	8	74	1	1		
8/4 1130	700	72	8.4	95	187	7.7	1.78[c]		4.6 / 0.20		0.0 / 0.00	108 / 1.77		6.0 / 0.17			0.1			116[e]	10	89	0	1		
9/15 1110	450	68	9.1	99	217	7.9	27 / 1.35	9.1 / 0.75	5.4 / 0.23	0.8 / 0.02	0.0 / 0.00	123 / 2.02	6.0 / 0.12	8.2 / 0.23	0.0 / 0.00	0.0 / 0.00	0.0	17	Al 0.01 PO4 0.00 [d]	134[f]	10	105	4	1		
10/13 1115	500	57	10.2	98	220	7.9	1.98[c]		5.3 / 0.23		0.0 / 0.00	112 / 1.84		7.4 / 0.21			0.0			137[e]	10	99	7	8		
11/10 1145	538	52	10.7	97	228	7.7	2.08[c]		5.3 / 0.23		0.0 / 0.00	115 / 1.88		9.0 / 0.25			0.1			142[e]	10	104	10	1		
12/8 0935	3,060	40	12.5	96	151	7.5	1.42[c]		3.6 / 0.16		0.0 / 0.00	78 / 1.28		3.0 / 0.08			0.0			94[e]	10	71	7	40		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

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TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

TRINITY RIVER AT LEWISTON (STA. 4a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/15 0915	250	37	12.6	93	165	7.7	1.52[c]		7.1 / 0.31		0.0 / 0.00	82 / 1.34		8.0 / 0.23			0.1			104[e]	17	76	9	2	Median 2.3	
2/12 1520	2,620	43	11.3	91	95.0	6.9	0.92[c]		2.9 / 0.13		0.0 / 0.00	46 / 0.75		3.0 / 0.08			0.0			60[e]	12	46	8	85	Maximum 23.	
3/11 1050	2,830	43	11.8	95	90.1	7.3	0.88[c]		2.0 / 0.09		0.0 / 0.00	48 / 0.79		3.0 / 0.08			0.0			57[e]	9	44	5	50	Minimum 0.06	
4/8 0815	4,410	47	11.4	97	75.4	7.3	0.76[c]		1.2 / 0.05		0.0 / 0.00	44 / 0.72		0.8 / 0.02			0.0			48[e]	6	38	2	10		
5/2 0912	2,270	49	10.3	89	94.1	7.4	5.6 / 0.28	7.8 / 0.64	1.7 / 0.07	0.3 / 0.01	0.0 / 0.00	57 / 0.93	1.0 / 0.02	1.8 / 0.05	0.0 / 0.00	0.1 / 0.01	0.0	17	Fe 0.02 Cu 0.01[d] Al 0.04 PO_4 0.00	63[f]	7	46	0	2		
6/10 0810	2,950	57	9.6	92	69.2	7.3	0.65[c]		0.7 / 0.03		0.0 / 0.00	38 / 0.62		2.6 / 0.07			0.0			44[e]	4	32	1	25		
7/15 0740	463	71	8.3	93	116	7.5	1.06[c]		5.0 / 0.22		0.0 / 0.00	70 / 1.15		5.0 / 0.14			0.0			73[e]	17	53	0	8		
8/5 0900	226	71	8.2	92	140	7.6	1.32[c]		4.2 / 0.18		0.0 / 0.00	82 / 1.34		5.5 / 0.16			0.1			88[e]	12	66	0	1		
9/16 0715	128	64	8.5	89	171	7.7	14 / 0.70	11 / 0.94	7.5 / 0.33	0.8 / 0.02	0.0 / 0.00	97 / 1.59	7.0 / 0.15	10 / 0.28	0.1 / 0.00	0.0 / 0.00	0.1	17	PO_4 0.00[d]	116[f]	17	82	2	5		
10/14 1015	165	55	10.1	95	179	7.5	1.52[c]		5.9 / 0.26		0.0 / 0.00	88 / 1.44		6.4 / 0.18			0.1			113[e]	15	76	4	12		
11/11 1035	177	53	10.1	92	174	7.5	1.60[c]		5.8 / 0.25		0.0 / 0.00	89 / 1.46		7.0 / 0.20			0.0			111[e]	14	80	7	2		
12/9 0800	889	41	11.7	91	103	7.3	0.92[c]		3.6 / 0.16		0.0 / 0.00	54 / 0.89		2.0 / 0.06			0.0			65[e]	15	46	2	70		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

VAN DUZEN RIVER NEAR BRIDGEVILLE (STA. 5a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/13 0920	300	38	12.6	94	166	7.3	1.60[c]		4.7 / 0.20		0.0 / 0.00	74 / 1.21		4.0 / 0.11			0.1			103[e]	11	80	19	25	Median 2.3	
2/10 1525	5,670	46	11.6	97	97.5	7.3	0.88[c]		2.4 / 0.10		0.0 / 0.00	44 / 0.72		3.5 / 0.10			0.0			60[e]	10	44	8	700	Maximum 23.	
3/9 0930	3,350	46	11.7	98	98.0	7.3	0.88[c]		2.2 / 0.10		0.0 / 0.00	44 / 0.72		2.5 / 0.07			0.0			61[e]	10	44	8	700	Minimum 0.06	
4/6 0830	796	53	10.1	92	120	7.2	1.18[c]		2.6 / 0.11		0.0 / 0.00	64 / 1.05		1.8 / 0.05			0.0			74[e]	9	59	7	70		
5/4 1125	466	55	10.9	102	134	7.0	16 / 0.80	5.8 / 0.48	3.1 / 0.13	0.6 / 0.02	0.0 / 0.00	73 / 1.20	9.0 / 0.19	2.2 / 0.06	0.0 / 0.00	0.1 / 0.01	0.0	11	Fe 0.06 PO4 0.05 Al 0.07 Cu 0.01 [d]	84[f]	9	64	4	9		
6/8 0820	328	60	9.3	93	143	7.7	1.36[c]		2.2 / 0.10		0.0 / 0.00	82 / 1.34		3.4 / 0.10			0.0			89[e]	7	68	1	25		
7/13 0720	53	67	9.1	98	199	7.9	1.84[c]		4.8 / 0.21		0.0 / 0.00	109 / 1.79		4.5 / 0.13			0.0			123[e]	10	92	3	2		
8/3 0545	23	65	8.1	86	233	7.7	2.12[c]		6.9 / 0.30		0.0 / 0.00	129 / 2.11		7.0 / 0.20			0.2			144[e]	12	106	0	2		
9/14 0710	35	62	8.8	90	254	7.7	34 / 1.70	8.5 / 0.70	7.5 / 0.33	1.2 / 0.03	4 / 0.13	130 / 2.13	15 / 0.31	5.2 / 0.15	0.0 / 0.00	0.0 / 0.00	0.2	12	PO4 0.00 [d] Tot. Alk. 138	152[f]	12	120	7	1		
10/11 1520	16	58	11.0	107	255	7.9	2.30[c]		6.9 / 0.30		0.0 / 0.00	120 / 1.97		4.8 / 0.14			0.1			158[e]	12	115	17	15		
11/8 1600	19	55	10.8	101	246	7.9	2.22[c]		7.0 / 0.30		0.0 / 0.00	124 / 2.03		4.2 / 0.12			0.1			152[e]	12	111	9	2		
12/6 1525	568	45	11.9	98	136	7.3	1.24[c]		3.6 / 0.16		0.0 / 0.00	68 / 1.11		1.5 / 0.04			0.0			84[e]	11	62	6	30		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

ALAMEDA CREEK NEAR NILES (STA. 73)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 1145	2.0	44	10.6	86	979	7.7	8.00[c]		71 / 3.09		0.0 / 0.00	334 / 5.47		62 / 1.75			0.8			597[e]	28	400	126	1	Median 2.3	
2/3 1145	14	51	9.2	82	671	7.6	4.66[c]		38 / 1.65		0.0 / 0.00	242 / 3.97		56 / 1.58			0.6			409[e]	26	233	35	140	Maximum >24,000.	
3/2 1100	3.4	52	12.2	111	846	8.1	6.52[c]		60 / 2.61		0.0 / 0.00	279 / 4.57		65 / 1.83			0.7			516[e]	29	326	97	4	Minimum 0.23	
4/12 1115	1.7	62	8.5	87	844	7.9	6.60[c]		71 / 3.09		0.0 / 0.00	324 / 5.31		90 / 2.54			0.9			515[e]	32	330	64	15		
5/3 0950	1.6	61	8.7	88	923	7.9	72 / 3.59	41 / 3.37	82 / 3.57	5.1 / 0.13	0.0 / 0.00	330 / 5.41	138 / 2.87	71 / 2.00	0.7 / 0.01	0.4 / 0.02	1.0	7.3	Fe 0.02 Zn 0.01[d] Al 0.88 Cu 0.01 PO_4 0.05	582[f]	33	348	77	5		
6/7 1000	0.1	72	8.6	98	931	7.9	6.90[c]		79 / 3.44		0.0 / 0.00	328 / 5.38		80 / 2.26			1.0			568[e]	33	345	76	5		
7/12	Dry	—	Not Sampled																							
8/2	Dry	—	Not Sampled																							
9/6 0755	0.5	66	7.1	76	515	7.7	42 / 2.10	23 / 1.87	40 / 1.74	2.1 / 0.05	0.0 / 0.00	202 / 3.31	81 / 1.69	24 / 0.68	0.0 / 0.00	0.3 / 0.02	0.5	7.4	Fe 0.07 PO_4 0.05[d] Al 0.12	320[f]	30	199	33	5		
10/4 1145	2.5	66	9.3	99	613	7.7	4.78[c]		33 / 1.44		0.0 / 0.00	226 / 3.70		34 / 0.96			0.6			374[e]	23	239	54	5		
11/8 1040	0.3	55	10.1	95	739	7.7	5.58[c]		58 / 2.52		0.0 / 0.00	276 / 4.52		45 / 1.27			0.7			451[e]	31	279	53	2		
12/13 0900	0.5	44	12.1	99	895	7.9	7.08[c]		67 / 2.91		4 / 0.13	310 / 5.08		62 / 1.75			0.8			546[e]	29	354	93	8		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

ALAMEDA CREEK NEAR NILES (STA. 73)

Date and time sampled P.S.T.	Mean Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[f]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/1-31	2.3				977	7.9	83 / 4.14	43 / 3.54	76 / 3.31	4.6 / 0.12	0 / 0.00	314 / 5.15	165 / 3.44	78 / 2.20	1.1 / 0.02	0.4 / 0.02	1.0	14	Fe 0.01	621	30	384	127			
2/1-4	17				688	7.5	54 / 2.69	28 / 2.27	44 / 1.91	18 / 0.46	0 / 0.00	226 / 3.70	87 / 1.81	50 / 1.41	10 / 0.16		0.6	18	Fe 0.02	421	26	248	63			
2/5-7	52				582	7.2	46 / 2.30	23 / 1.86	40 / 1.74	8.4 / 0.21	0 / 0.00	164 / 2.69	79 / 1.64	48 / 1.21	23 / 0.37		0.5	18	Fe 0.02	362	28	208	74			
2/8-10	1,315				330	7.5	30 / 1.50	15 / 1.22	19 / 0.83	4.9 / 0.13	0 / 0.00	140 / 2.29	33 / 0.69	21 / 0.59	7.6 / 0.12	0.4 / 0.02	0.3	15	Fe 0.04	215	23	136	21			
2/11-16	225				469	7.7	40 / 2.00	21 / 1.76	27 / 1.17	4.9 / 0.13	0 / 0.00	178 / 2.92	55 / 1.15	28 / 0.79	6.7 / 0.11	0.3 / 0.02	0.4	21	Fe 0.01	292	23	188	42			
2/17-29	11				747	8.0	63 / 3.14	34 / 2.78	48 / 2.09	6.0 / 0.15	0 / 0.00	268 / 4.39	99 / 2.06	55 / 1.55	4.9 / 0.08	0.3 / 0.02	0.6	21	Fe 0.01	464	26	296	76			
3/1-9	3.7				880	8.0	49 / 2.45	49 / 4.07	58 / 2.52	6.1 / 0.16	0 / 0.00	260 / 4.26	137 / 2.85	69 / 1.95	0.5 / 0.01	0.2 / 0.01	0.7	14	Fe 0.00	512	27	326	113			
3/10-31	3.1				943	8.0	39 / 1.95	65 / 5.37	63 / 2.74	6.2 / 0.16	0 / 0.00	315 / 5.16	140 / 2.91	77 / 2.17	0.4 / 0.01	0.3 / 0.02	0.9	14	Fe 0.01	561	27	366	108			
4/4 1645																			Phenol 5.3 ppb							
4/1-8	2.3				951	8.5	72 / 3.59	49 / 4.01	63 / 2.74	5.8 / 0.15	10 / 0.33	314 / 5.15	133 / 2.77	85 / 2.40	2.2 / 0.04	0.3 / 0.02	1.1	14	Fe 0.03	590	26	380	106			
4/9-24	1.6				928	8.2	59 / 2.94	59 / 4.86	64 / 2.78	5.6 / 0.14	0 / 0.00	310 / 5.08	150 / 3.12	90 / 2.54	0.8 / 0.01	0.3 / 0.02	1.2	10	Fe 0.03	593	26	390	136			
4/25-30	3.3				897	8.4	69 / 3.44	51 / 4.16	60 / 2.61	5.7 / 0.15	8 / 0.27	322 / 5.28	123 / 2.56	85 / 2.40	0.9 / 0.01	0.3 / 0.02	1.1	10	Fe 0.03	573	25	380	103			
5/1-11	1.5				952	8.2	72 / 3.59	44 / 3.62	67 / 2.91	4.8 / 0.12	0 / 0.00	322 / 5.28	127 / 2.64	76 / 2.14	0.4 / 0.01	0.3 / 0.02	1.0	9.1	Fe 0.34	561	28	360	96			
5/20 1315																			Phenol 3.4 ppb							

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

ALAMEDA CREEK NEAR NILES (STA. 73)

Date and time sampled P.S.T.	Mean Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[f]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
5/12-21	0.6				949	8.5	66/3.29	36/2.97	71/3.09	4.9/0.13	12/0.40	255/4.18	138/2.87	75/2.12	1.0/0.02	0.3/0.02	1.0	8.3	Fe 0.10	539	33	313	84			
5/22-31	1.2				933	8.3	55/2.74	47/3.85	68/2.96	5.1/0.13	3/0.10	318/5.21	130/2.71	70/1.97	0.4/0.01	0.4/0.02	1.0	8.2	Fe 0.01	547	31	330	64			
6/1-12	0.1				927	8.2	62/3.09	43/3.55	81/3.52	3.8/0.10	0/0.00	327/5.36	142/2.96	71/2.00	0.9/0.01	0.5/0.03	1.1	13	Fe 0.01	579	34	332	64			
6/13-20	ponded				966	8.2	59/2.94	46/3.78	90/3.92	4.0/0.10	0/0.00	331/5.43	177/3.69	70/1.97	1.0/0.02	0.5/0.03	1.1	11	Fe 0.01	623	36	336	65			
8/18	0.1				1160	8.4	72/3.59	51/4.17	122/5.31	4.0/0.10	11/0.37	322/5.28	222/4.62	84/2.37	0.3/0.00	0.5/0.03	1.3	9.9	Fe 0.03	736	40	388	106			
8/11,18-20	0.2				1140	8.0	71/3.54	53/4.38	96/4.18	4.2/0.11	0/0.00	315/5.16	241/5.02	80/2.26	1.4/0.02	0.4/0.02	1.2	13	Fe 0.01	716	34	396	138			
9/3-4	12				457	7.6	41/2.05	17/1.39	29/1.26	2.5/0.06	0/0.00	168/2.75	62/1.29	20/0.56	1.9/0.03	0.4/0.02	0.4	14	Fe 0.00	271	26	172	34			
9/5-9	0.3				547	7.7	46/2.30	22/1.82	37/1.61	2.2/0.06	0/0.00	196/3.21	84/1.75	26/0.73	0.4/0.01	0.4/0.02	0.5	11	Fe 0.00	326	28	206	45			
9/15-22	1.2				715	8.0	53/2.64	26/2.16	53/2.31	2.7/0.07	0/0.00	256/4.20	99/2.06	40/1.13	0.8/0.01	0.2/0.01	0.8	13	Fe 0.00	416	32	240	30			
9/23-30	2.8				630	8.4	47/2.35	28/2.33	41/1.78	2.0/0.05	8/0.27	219/3.59	83/1.73	36/1.02	1.4/0.02	0.2/0.01	0.7	11	Fe 0.00	366	27	234	41			
10/1-8	1.5				616	8.5	52/2.59	28/2.33	39/1.70	1.7/0.04	11/0.37	221/3.62	76/1.58	36/1.02	2.3/0.04	0.1/0.01	0.5	16	Fe 0.01	372	26	246	47			
10/27-31	0.1				777	8.6	48/2.40	36/2.96	68/2.96	2.6/0.07	15/0.50	239/3.92	122/2.54	47/1.33	2.1/0.03	0.3/0.02	0.8	13	Fe 0.01	473	35	268	47			
11/1-10	1.1				809	8.2	58/2.89	40/3.27	54/2.35	2.5/0.06	0/0.00	283/4.64	115/2.39	44/1.24	0.9/0.01		0.7	10	Fe 0.03	464	27	308	76			
11/11-20	0.7				771	8.0	61/3.04	35/2.84	54/2.35	2.3/0.06	0/0.00	278/4.56	110/2.29	44/1.24	0.7/0.01	0.2/0.01	0.7	7.9	Fe 0.01	453	28	294	66			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

ALAMEDA CREEK NEAR NILES (STA. 73)

Date and time sampled P.S.T.	Mean Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[f]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
11/21-30	1.1				815	8.0	61 / 3.04	38 / 3.16	56 / 2.44	2.3 / 0.06	0 / 0.00	273 / 4.47	120 / 2.50	49 / 1.38	0.6 / 0.01	0.4 / 0.02	0.8	8.5	Fe 0.02	471	28	310	86			
12/1-8	2.2				828	8.1	68 / 3.39	35 / 2.89	60 / 2.61	2.7 / 0.07	0 / 0.00	312 / 5.11	112 / 2.33	42 / 1.18	1.0 / 0.02	0.2 / 0.01	0.9	13	Fe 0.00	489	29	314	58			
12/9-17	0.8				833	8.2	56 / 2.79	40 / 3.33	63 / 2.74	2.6 / 0.07	0 / 0.00	264 / 4.33	134 / 2.79	62 / 1.75	0.3 / 0.00	0.2 / 0.01	1.0	12	Fe 0.00	501	31	306	90			
12/18-31	0.9				915	8.2	60 / 2.99	45 / 3.69	69 / 3.00	2.6 / 0.07	0 / 0.00	264 / 4.33	159 / 3.31	70 / 1.97	0.7 / 0.01	0.2 / 0.01	0.9	8.7	Fe 0.00	546	31	334	118			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

ARROYO DEL VALLE AT VETERANS ADMINISTRATION HOSPITAL (STA. 71)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 1045	0.1	48	8.5	75	1,660	7.7	11.50/c		157/6.83		0.0/0.00	442/7.24		215/6.06			2.8			1023[e]	37	575	213	5	Median 6.2	
2/3 1035	34	50	10.3	93	527	7.7	4.78/c		24/1.04		6/0.20	216/3.54		24/0.68			0.4			325[e]	18	239	52	8	Maximum 62.	
3/2 1015	8.9	52	11.1	103	590	7.9	3.20/c		31/1.35		0.0/0.00	270/4.43		26/0.73			0.5			363[e]	21	260	39	1	Minimum 0.23	
4/12 1035	2.7	62	9.4	98	687	7.9	5.86/c		40/1.74		0.0/0.00	309/5.06		32/0.90			0.8			423[e]	23	293	40	25		
5/3 0905	3.0	57	8.9	87	671	7.7	66/3.29	31/2.59	45/1.96	2.8/0.07	0.0/0.00	304/4.98	84/1.75	34/0.96	0.3/0.00	0.1/0.01	0.6	16	Fe 0.05 Cu 0.02[d] Al 0.18 Zn 0.02 PO_4 0.25	430[f]	25	294	45	1		
6/7 0900	0.5	71	9.9	114	839	7.9	6.90/c		64/2.78		0.0/0.00	353/5.79		68/1.92			1.0			517[e]	29	345	56	2		
7/12 0900	0.2	66	10.6	116	947	7.7	6.86/c		78/3.39		0.0/0.00	374/6.13		82/2.31			1.4			583[e]	33	343	36	1		
8/2	Ponded	--	Not Sampled																							
9/6	Ponded	--	Not Sampled																							
10/4	Dry	--	Not Sampled																							
11/8	Dry	--	Not Sampled																							
12/13 0800	0.1	45	5.0	42	1,720	7.5	11.22/c		151/6.57		0.0/0.00	475/7.79		204/5.75			3.2			1,060[e]	37	561	171	6		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

ARROYO DEL VALLE NEAR LIVERMORE (STA. 71)

Date and time sampled P.S.T.	Mean Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[f]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1960																										USGS
1/1-26	0.1				1,680	8.2	101/5.04	80/6.60	159/6.92	6.8/0.17	0/0.00	451/7.39	236/4.91	238/6.71	1.4/0.02	0.2/0.01	2.2	37	Fe 0.00	1,080	37	582	212			
1/27-31 2/1	3.4				949	8.1	82/4.09	48/3.93	55/2.39	3.7/0.09	0/0.00	348/5.70	108/2.25	78/2.20	1.5/0.02		0.7	26	Fe 0.00	574	23	401	116			
2/2-8	95				528	8.0	50/2.50	26/2.16	25/1.09	2.9/0.07	0/0.00	232/3.80	72/1.50	16/0.45	2.3/0.04	0.2/0.01	0.6	22	Fe 0.00	331	19	233	43			
2/9-10	941				258	7.3	26/1.30	12/1.02	8.9/0.39	3.0/0.08	0/0.00	116/1.90	25/0.52	8.0/0.23	2.8/0.05		0.3	16	Fe 0.00	159	14	116	21			
2/11-29	47				497	8.0	44/2.20	26/2.11	21/0.91	3.2/0.08	0/0.00	214/3.51	41/0.85	25/0.70	3.4/0.05	0.3/0.02	0.5	20	Fe 0.00	289	17	216	41			
3/2-16	7.9				607	7.9	42/2.10	38/3.16	31/1.35	3.0/0.08	0/0.00	271/4.44	77/1.60	24/0.68	0.5/0.01	0.1/0.01	0.4	20	Fe 0.01	369	20	263	41			
3/17-31	4.9				637	8.1	42/2.10	43/3.54	34/1.48	3.1/0.08	0/0.00	285/4.67	78/1.62	26/0.73	0.4/0.01	0.1/0.01	0.5	21	Fe 0.00	388	21	282	48			
4/1-12	2.8				679	8.5	58/2.89	45/3.71	40/1.74	2.9/0.07	6/0.20	300/4.92	97/2.02	45/1.27	2.0/0.03	0.2/0.01	0.6	21	Fe 0.03	466	21	330	74			
4/18 1345																			Phenol 13 ppb							
4/13-25	1.3				725	8.4	61/3.04	43/3.56	44/1.91	2.9/0.07	8/0.27	310/5.08	91/1.89	55/1.55	1.4/0.02	0.3/0.02	0.7	22	Fe 0.03	482	22	330	63			
4/26-30	2.5				699	8.0	59/2.94	45/3.66	40/1.74	2.8/0.07	0/0.00	320/5.24	88/1.83	45/1.27	0.6/0.01	0.3/0.02	0.6	22	Fe 0.03	461	21	330	68			
5/1-10	2.4				710	8.1	57/2.84	36/2.94	40/1.74	3.0/0.08	0/0.00	319/5.23	80/1.67	34/0.96	0.9/0.01	0.1/0.01	0.6	21	Fe 0.09	430	23	289	27			
5/11-20	1.4				685	8.5	45/2.25	39/3.17	49/2.13	3.1/0.08	13/0.43	264/4.33	94/1.96	40/1.13	0.6/0.01	0.2/0.01	0.7	48	Fe 0.06	463	29	254	16			
5/20 1430																			Phenol 9.0 ppb							

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

ARROYO DEL VALLE NEAR LIVERMORE (STA. 71)

Date and time sampled P.S.T.	Mean Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[f]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
5/21-31	0.4				823	8.2	60/2.99	33/3.15	56/2.44	3.4/0.09	0/0.00	330/5.44	99/2.06	52/1.47	0.8/0.01	0.1/0.01	0.8	20	Fe 0.11	493	28	307	36			
6/1-11	0.3				850	8.1	62/3.09	40/3.27	73/3.18	2.7/0.07	0/0.00	341/5.59	104/2.17	59/1.66	0.5/0.01	0.2/0.01	1.0	23	Fe 0.02	533	33	318	38			
6/12-21	0.3				907	8.2	64/3.19	43/3.53	80/3.48	2.9/0.07	0/0.00	364/5.97	106/2.21	68/1.92	0.7/0.01	0.2/0.01	1.3	28	Fe 0.01	573	34	336	38			
6/22-30	0.3				897	8.2	58/2.89	43/3.51	81/3.52	3.0/0.08	0/0.00	346/5.67	107/2.23	73/2.06	0.5/0.01	0.2/0.01	1.2	27	Fe 0.01	564	35	320	36			
7/1-4	0.2				870	8.5	47/2.35	42/3.49	78/3.39	3.1/0.01	12/0.40	264/4.33	117/2.44	74/2.09	0.8/0.01	0.1/0.01	1.4	26	Fe 0.00	531	36	292	56			
7/5-17	0.2				955	8.3	59/2.94	43/3.50	91/3.96	3.0/0.08	5/0.17	322/5.28	118/2.46	81/2.28	0.5/0.01	0.1/0.01	1.5	28	Fe 0.00	589	38	322	50			
7/18-8/2	0.1				1,020	8.5	69/3.44	39/3.24	100/4.35	3.2/0.08	12/0.40	317/5.20	125/2.60	94/2.65	1.0/0.02	0.1/0.01	1.9	27	Fe 0.00	628	39	334	54			
11/27 12/1-4,15	0.1				1,590	8.1	100/4.99	66/5.41	167/7.26	4.2/0.11	0/0.00	460/7.54	202/4.21	192/5.41	1.6/0.03	0.2/0.01	2.4	36	Fe 0.00	998	41	520	143			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 2
ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

COYOTE CREEK NEAR MADRONE (STA. 82)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/13 1350	1.8	48	12.4	108	385	8.3	3.38[c]		17 / 0.74		3 / 0.10	183 / 3.00		12 / 0.34			0.2			225[e]	18	169	14	1	Median 23.	
2/4 1500	1.6	53	10.7	99	380	7.9	3.44[c]		15 / 0.65		0.0 / 0.00	186 / 3.05		12 / 0.34			0.0			222[e]	16	172	19	20	Maximum 2,400.	
3/3 1550	20	55	11.8	112	376	8.1	3.20[c]		17 / 0.74		0.0 / 0.00	182 / 2.98		12 / 0.34			0.1			220[e]	19	160	11	25	Minimum 0.23	
4/13 1400	50	57	12.0	117	376	8.1	3.26[c]		16 / 0.70		0.0 / 0.00	182 / 2.98		12 / 0.34			0.1			220[e]	18	163	14	25		
5/4 1250	92	54	11.0	103	375	7.7	40 / 2.00	16 / 1.28	16 / 0.70	2.6 / 0.07	0.0 / 0.00	186 / 3.05	36 / 0.75	12 / 0.34	0.7 / 0.01	0.1 / 0.01	0.1	13	Fe 0.04 Al 0.16[d] PO_4 0.00 Cu 0.02 Zn 0.02	229[f]	17	164	11	2		
6/8 1445	115	57	10.7	104	374	7.7	3.32[c]		16 / 0.70		0.0 / 0.00	190 / 3.11		12 / 0.34			0.1			218[e]	17	166	10	20		
7/13 1130	124	59	10.5	105	385	7.9	3.40[c]		11 / 0.48		0.0 / 0.00	200 / 3.28		16 / 0.45			0.2			225[e]	12	170	6	4		
8/3 1530	124	64	9.8	103	389	7.9	3.46[c]		18 / 0.78		8 / 0.27	186 / 3.05		12 / 0.34			0.1			227[e]	18	173	7	10		
9/6 1100	115	70	8.7	98	427	7.9	44 / 2.20	19 / 1.60	20 / 0.87	2.3 / 0.06	0.0 / 0.00	219 / 3.59	32 / 0.67	18 / 0.51	0.5 / 0.01	0.1 / 0.01	0.1	12	Fe 0.06 PO_4 0.05[d] Al 0.10 Zn 0.05	256[f]	18	190	10	20		
10/5 1425	82	70	8.9	100	442	7.7	4.00[c]		19 / 0.83		7 / 0.23	201 / 3.29		16 / 0.45			0.1			258[e]	17	200	24	25		
11/9 1255	72	58	9.7	96	591	7.5	5.20[c]		25 / 1.09		0.0 / 0.00	287 / 4.70		25 / 0.70			0.1			345[e]	17	260	25	100		
12/14 1050	7.5	48	12.0	104	449	8.1	3.94[c]		20 / 0.87		4 / 0.13	202 / 3.31		14 / 0.39			0.2			262[e]	18	197	25	25		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

LOS GATOS CREEK AT LOS GATOS (STA. 74)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/12 1345	1.5	50	10.6	95	523	7.8	4.7[c]		18 / 0.78		0.0 / 0.00	188 / 3.08		12 / 0.34			0.1			319[e]	14	237	83	80	Median 23.	
2/3 1350	4.2	52	10.1	94	344	7.4	3.24[c]		12 / 0.52		0.0 / 0.00	119 / 1.95		13 / 0.37			0.1			210[e]	14	162	64	500	Maximum 7,000.	
3/2 1305	76	51	10.5	96	382	7.5	3.28[c]		14 / 0.61		0.0 / 0.00	129 / 2.11		10 / 0.28			0.0			233[e]	16	164	58	87	Minimum 0.62	
4/12 1325	1.9	64	8.9	95	752	7.9	7.00[c]		26 / 1.13		0.0 / 0.00	314 / 5.15		20 / 0.55			0.1			459[e]	14	350	93	85		
5/3 1140	1.6	60	8.9	91	751	7.7	95 / 4.74	32 / 2.66	28 / 1.22	3.5 / 0.09	0.0 / 0.00	204 / 4.98	151 / 3.14	20 / 0.56	0.8 / 0.01	0.1 / 0.01	0.1	15	PO_4 0.15 Mn 0.11[d] Fe 0.06 Cu 0.01 Al 0.26 Zn 0.02	496[f]	14	370	121	120		
6/7 1205	0.5	68	8.9	100	841	7.7	8.70[c]		30 / 1.30		0.0 / 0.00	369 / 6.05		28 / 0.79			0.1			513[e]	13	435	132	1		
7/12 1030	0.3	66	9.1	99	790	7.9	7.68[c]		25 / 1.09		0.0 / 0.00	361 / 5.92		21 / 0.59			0.2			482[e]	12	384	88	2		
8/2 1320	1.0	77	8.5	104	650	7.9	5.56[c]		26 / 1.13		10 / 0.33	266 / 4.36		22 / 0.62			0.1			397[e]	17	278	43	2		
9/6 1515	0.3	72	8.7	101	723	7.7	82 / 4.09	34 / 2.83	34 / 1.48	2.5 / 0.06	0.0 / 0.00	368 / 6.03	99 / 2.06	16 / 0.45	0.0 / 0.00	0.1 / 0.01	0.1	16	Al 0.05 PO_4 0.05[d]	465[f]	17	346	44	4		
10/4 1250	0.3	67	10.1	111	785	7.7	6.88[c]		28 / 1.22		0.0 / 0.00	328 / 5.38		21 / 0.59			0.2			479[e]	15	344	75	5		
11/8 1215	23	57	9.6	94	370	7.7	3.46[c]		14 / 0.61		0.0 / 0.00	191 / 3.13		9.0 / 0.25			0.2			226[e]	15	173	16	196		
12/13 1015	2.8	45	11.3	95	720	7.9	5.72[c]		28 / 1.22		6 / 0.20	279 / 4.57		20 / 0.56			0.1			439[e]	18	286	47	70		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

32505-D-E 6-61 200 SPO

TABLE B - 2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

NAPA RIVER NEAR SAINT HELENA (STA. 72)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/14 1515	9.8	46	9.8	83	399	7.2	2.22[c]		36 / 1.57		0.0 / 0.00	120 / 1.97		47 / 1.33			1.5			266[e]	41	111	13	15	Median 230.	
2/4 1115	150	51	9.9	89	163	7.2	1.20[c]		9.9 / 0.43		0.0 / 0.00	70 / 1.15		13 / 0.37			0.2			109[e]	26	60	3	30	Maximum 24,000.	
3/11 0955	158	54	9.8	92	161	7.1	1.12[c]		9.6 / 0.42		0.0 / 0.00	64 / 1.05		7.8 / 0.22			0.2			107[e]	27	56	4	15	Minimum <0.045	
4/15 0930	30	58	9.4	93	244	7.2	1.78[c]		16 / 0.70		0.0 / 0.00	107 / 1.75		14 / 0.39			0.5			163[e]	28	89	1	25		
5/11 1040	16	69	8.2	91	289	7.0	20 / 1.00	11 / 0.92	19 / 0.83	3.8 / 0.10	0.0 / 0.00	122 / 2.00	18 / 0.37	19 / 0.54	2.5 / 0.04	0.1 / 0.01	0.7	44	Al 0.06 Zn 0.02[d] PO_4 0.55	198[f]	29	96	0	10		
6/15 1045	3.4	71	7.6	87	339	7.3	2.56[c]		20 / 0.87		0.0 / 0.00	156 / 2.56		17 / 0.48			0.6			206[e]	25	128	0	4		
7/14 1000	0.5	72	10.0	115	348	7.7	2.88[c]		18 / 0.78		0.0 / 0.00	186 / 3.05		14 / 0.39			0.4			232[e]	21	144	0	2		
8/5 0815	0.5	67	5.6	61	361	7.1	2.96[c]		19 / 0.83		0.0 / 0.00	192 / 3.15		14 / 0.39			0.4			241[e]	22	148	0	2		
9/15 0940	0.1	65	6.7	72	367	7.2	34 / 1.70	18 / 1.44	20 / 0.87	2.9 / 0.07	0.0 / 0.00	203 / 3.33	9.0 / 0.19	17 / 0.48	0.8 / 0.01	0.2 / 0.01	0.4	33	Al 0.08 Zn 0.05[d] PO_4 0.15	235[f]	21	157	0	1		
10/13 1155	0.4	61	10.8	110	499	7.7	3.64[c]		25 / 1.09		0.0 / 0.00	155 / 2.54		67 / 1.89			1.9			333[e]	23	182	55	5		
11/4 1040	1.3	57	9.5	92	439	7.3	3.46[c]		22 / 0.96		0.0 / 0.00	130 / 2.95		44 / 1.24			0.9			293[e]	22	173	25	2		
12/8 1130	7.6	45	8.6	72	320	7.1	1.68[c]		30 / 1.30		0.0 / 0.00	104 / 1.70		36 / 1.02			1.1			213[e]	44	84	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 3
ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

CARMEL RIVER AT ROBLES DEL RIO (STA. 83)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/13 0800	2.4	59	7.4	74	1,180	7.3	—/9.10[c]		82/3.57		0.0/0.00	275/4.51		120/3.38			0.1			732[e]	28	455	229	1	Median 6.2	
2/4 0820	178	50	10.6	95	200	7.3	—/1.56[c]		9.9/0.43		0.0/0.00	70/1.15		10/0.28			0.0			124[e]	22	78	21	20	Maximum 230	
3/3 0910	52	49	11.0	97	307	7.5	—/2.28[c]		17/0.74		0.0/0.00	112/1.84		18/0.51			0.0			190[e]	25	114	22	11	Minimum 0.21	
4/13 0750	11	55	9.1	86	606	7.5	—/4.32[c]		42/1.83		0.0/0.00	184/3.02		48/1.35			0.0			376[e]	30	216	65	15		
5/4 0750	20	58	9.2	91	356	7.5	38/1.90	10/0.84	21/0.91	2.2/0.06	0.0/0.00	131/2.15	49/1.02	22/0.62	0.3/0.00	0.2/0.01	0.0	25	Al 0.14 Cu 0.03[d] Zn 0.02 PO_4 0.05 Fe 0.07	233[f]	25	137	30	1		
6/8 0740	0.6	60	5.6	56	662	7.3	—/4.84[c]		46/2.00		0.0/0.00	206/3.38		51/1.44			0.0			410[e]	29	242	73	25		
7/12	Dry	—	Not Sampled																							
8/2	Dry	—	Not Sampled																							
9/7	Dry	—	Not Sampled																							
10/4	Dry	—	Not Sampled																							
11/8	Dry	—	Not Sampled																							
12/13 1540	9.4	51	10.7	97	480	7.5	—/3.68[c]		31/1.35		0.0/0.00	163/2.67		28/0.79			0.1			298[e]	27	184	50	8		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 3

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

PAJARO RIVER NEAR CHITTENDEN (STA. 77)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/13 1015	20	45	10.2	84	1,270	7.7	11.60[c]		73 / 3.18		0.0 / 0.00	348 / 5.70		72 / 2.03			0.5			801[e]	22	580	295	5	Median 23.	
2/4 1255	121	53	9.0	83	553	7.4	4.42[c]		34 / 1.48		0.0 / 0.00	179 / 2.93		38 / 1.07			0.3			349[e]	25	221	74	90	Maximum 7,000.	
3/3 1110	36	56	9.7	92	1,240	7.7	10.32[c]		86 / 3.74		0.0 / 0.00	352 / 5.77		85 / 2.40			0.5			782[e]	27	516	227	50	Minimum 0.23	
4/13 0955	24	61	8.5	86	1,280	7.7	10.40[c]		89 / 3.87		0.0 / 0.00	394 / 6.46		100 / 2.82			0.5			808[e]	27	520	197	15		
5/[illegible] 0910	21	61	7.8	79	1,310	7.7	89 / 4.44	72 / 5.96	114 / 4.96	5.8 / 0.15	0.0 / 0.00	402 / 6.59	264 / 5.50	108 / 3.05	12 / 0.19	0.2 / 0.01	0.7	22	Fe 0.05 Al 0.44[d] PO_4 0.35 Cu 0.02 Zn 0.01	886[f]	32	520	190	3		
6/8 1010	5.0	63	7.7	80	1,430	7.9	10.60[c]		124 / 5.39		0.0 / 0.00	460 / 7.54		135 / 3.81			0.6			902[e]	34	530	153	25		
7/13 1015	2.9	66	8.7	93	1,420	7.9	9.12[c]		150 / 6.52		0.0 / 0.00	547 / 8.97		155 / 4.37			0.9			896[e]	42	456	7	6		
8/3 1310	2.0	72	9.7	111	1,490	7.9	9.40[c]		142 / 6.18		12 / 0.40	524 / 8.59		172 / 4.85			0.8			940[e]	40	470	21	5		
9/[illegible] 0710	2.4	59	7.9	78	1,500	8.1	76 / 3.79	78 / 6.41	176 / 7.66	4.0 / 0.10	0.0 / 0.00	573 / 9.39	226 / 4.71	145 / 4.09	0.7 / 0.01	0.4 / 0.02	0.7	8.2	Fe 0.05 PO_4 0.35[d] Al 0.39 Zn 0.04	997[f]	43	510	40	5		
10/5 0910	1.5	57	10.1	97	1,630	7.9	8.88[c]		169 / 7.35		13 / 0.43	499 / 8.18		156 / 4.40			0.8			1,029[e]	45	444	14	10		
11/9 0935	1.8	52	9.3	84	1,690	7.9	9.90[c]		198 / 8.61		16 / 0.53	536 / 8.79		185 / 5.22			0.6			1,066[e]	47	495	29	2		
12/14 0745	5.5	46	9.9	83	1,430	8.0	9.16[c]		161 / 7.00		10 / 0.33	448 / 7.34		145 / 4.09			0.7			902[e]	43	458	74	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 3

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

SALINAS RIVER NEAR SPRECKELS (STA. 43)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/13 0900	10	44	5.9	48	1,590	7.6	11.60[c]		128 / 5.57		0.0 / 0.00	801 / 13.13		126 / 3.55			0.2			933[e]	32	580	0	7	Median 500.	
2/4 0910	900	49	10.0	87	327	7.3	2.78[c]		15 / 0.65		0.0 / 0.00	122 / 2.00		21 / 0.59			0.0			192[e]	19	139	39.	75	Maximum >7,000.	
3/3 1000	77	52	10.3	93	793	7.5	6.16[c]		54 / 2.35		0.0 / 0.00	262 / 4.29		51 / 1.44			0.2			465[e]	28	308	93	13	Minimum 0.23	
4/13 0900	5.0	59	12.5	123	1,650	7.5	12.30[c]		132 / 5.74		0.0 / 0.00	850 / 13.93		No Test			0.3			969[e]	32	615	0	35		
5/4 0835	4.8	62	8.9	91	1,650	7.7	152 / 7.58	57 / 4.66	157 / 6.83	41 / 1.05	0.0 / 0.00	830 / 13.60	91 / 1.89	136 / 3.84	14 / 0.23	0.5 / 0.03	0.2	36	Fe 0.04 Mn 2.10[d] Al 0.99 PO_4 0.30 Cu 0.01	1,090[f]	34	612	0	10		
6/8 0900	1.4	65	10.5	111	1,580	7.3	9.40[c]		173 / 7.53		0.0 / 0.00	362 / 5.93		165 / 4.65			0.7			927[e]	44	470	173	5		
7/13 0730	2.0	68	9.9	108	1,340	7.3	6.68[c]		150 / 6.52		0.0 / 0.00	284 / 4.65		160 / 4.51			0.5			787[e]	49	334	101	3		
8/3 0710	1.0 (est.)	67	4.0	43	1,360	7.3	7.00[c]		146 / 6.35		0.0 / 0.00	344 / 5.64		185 / 5.22			0.5			798[e]	48	350	68	15		
9/7 0840	1.8	65	1.5	16	1,150	7.1	33 / 1.65	40 / 3.33	142 / 6.18	13 / 0.33	0.0 / 0.00	312 / 5.11	117 / 2.44	135 / 3.81	0.7 / 0.01	2.4 / 0.12	0.4	62	Fe 0.09 Zn 0.06[d] Al 0.33 PO_4 47	699[f]	54	249	0	3		
10/5 0720	1.0 (est.)	66	1.7	18	1,090	7.3	4.10[c]		109 / 4.79		0.0 / 0.00	272 / 4.46		140 / 3.95			0.4			640e	54	205	0	110		
11/8 1510	3.7	59	3.4	34	1,610	7.5	11.92[c]		138 / 6.00		22 / 0.73	726 / 11.90		160 / 4.51			0.3			945[e]	33	596	0	12		
12/13 1435	3.5 (est.)	53	2.6	24	1,660	7.5	12.00[c]		126 / 5.48		0.0 / 0.00	830 / 13.60		132 / 3.72			0.2			974[e]	31	600	0	20		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 3

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

SAN BENITO RIVER NEAR BEAR VALLEY FIRE STATION (STA. 77a)

Date and time sampled P.S.T.	Discharge in cfs Estimated	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/13 1130	5.0	47	12.0	105	1,980	8.5	—/12.10[c]		244/10.61		23/0.77	502/8.23		160/4.51			1.9			1,283[e]	47	605	155	50	Median 13.	
2/4 1105	34	50	10.5	96	1,110	8.3	—/9.04[c]		97/4.22		27/0.90	401/6.57		55/1.55			0.8			719[e]	32	452	78	400	Maximum 230	
3/3 1305	4.0	64	9.7	105	1,580	8.1	—/11.00[c]		169/7.35		20/0.67	497/8.15		102/2.88			1.5			1,024[e]	40	550	109	1	Minimum 1.3	
4/13 1115	1.5	71	10.2	119	1,790	8.1	—/12.30[c]		200/8.70		14/0.47	496/8.13		140/3.95			1.6			1,160[e]	41	615	185	15		
5/4 1020	1.5	66	9.5	105	1,820	8.1	51/2.54	116/9.56	200/8.70	4.8/0.12	14/0.47	531/8.70	408/8.49	135/3.81	0.3/0.00	0.1/0.01	1.8	10	Tot. Alk. 559 Fe 0.04 Al 0.46[d] PO_4 0.00 Cu 0.01 Zn 0.02	1,200[f]	42	605	147	2		
6/8 1210	0.5	86	8.9	120	1,990	8.1	—/11.80[c]		241/10.48		20/0.67	500/8.20		180/5.08			2.0			1,290[e]	47	590	146	25		
7/13 0915	0.5	71	9.5	111	1,970	8.1	—/11.44[c]		231/10.05		0.0/0.00	536/8.79		180/5.08			2.0			1,277[e]	47	572	132	5		
8/3 1020	0.1	78	10.9	136	2,020	7.9	—/12.00[c]		250/10.88		20/0.67	510/8.36		168/4.74			2.0			1,309[e]	48	600	148	1		
9/7 1100	0.5	79	8.4	106	2,000	7.9	63/3.14	116/9.56	273/11.88	4.0/0.10	19/0.63	564/9.24	475/9.89	185/5.22	0.3/0.00	0.3/0.02	2.3	17	Tot. Alk. 603 Fe 0.04 PO_4 0.05[d] Al 0.32 Zn 0.02	1,430[f]	48	635	141	3		
10/5 1055	0.2	73	10.5	125	2,010	8.1	—/12.20[c]		218/9.48		13/0.43	516/8.46		170/4.79			2.1			1,302[e]	44	610	166	1		
11/9 1045	1.0	62	10.5	111	2,100	8.1	—/12.28[c]		273/11.88		18/0.60	468/7.67		215/6.06			1.6			1,361[e]	49	614	200	2		
12/14 0915	2.5	46	11.5	99	1,840	8.3	—/12.20[c]		166/7.22		16/0.53	498/8.16		128/3.61			1.7			1,192[e]	37	610	175	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 3

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

SAN LORENZO RIVER AT BIG TREES NEAR FELTON (STA. 75)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 1530	78	46	10.4	88	334	7.3	2.14[c]		23 / 1.00		0.0 / 0.00	103 / 1.69		23 / 0.65			0.1			203[e]	29	122	38	75	Median 6.2	
2/3 1500	232	50	10.5	94	266	7.3	2.10[c]		15 / 0.65		0.0 / 0.00	83 / 1.36		22 / 0.62			0.0			162[e]	24	105	37	60	Maximum 2,400.	
3/2 1415	61	52	10.5	96	356	7.4	2.66[c]		20 / 0.87		0.0 / 0.00	126 / 2.07		19 / 0.54			0.0			216[e]	25	133	30	6	Minimum 2.3	
4/12 1455	40	62	10.4	107	360	7.7	2.60[c]		23 / 1.00		0.0 / 0.00	136 / 2.23		23 / 0.65			0.0			219[e]	28	130	18	15		
5/3 1250	45	56	10.6	101	341	7.5	41 / 2.05	6.4 / 0.53	22 / 0.96	2.5 / 0.06	0.0 / 0.00	132 / 2.16	40 / 0.83	20 / 0.56	0.3 / 0.00	0.1 / 0.01	0.1	24	Fe 0.14 PO_4 0.50[d] Al 0.15 Zn 0.02 Cu 0.06	222[f]	27	129	21	8		
6/7 1335	23	72	10.2	117	353	8.0	2.60[c]		23 / 1.00		0.0 / 0.00	145 / 2.38		26 / 0.73			0.1			215[e]	28	130	11	1		
7/12 1200	15	71	10.5	119	367	7.9	2.70[c]		24 / 1.04		0.0 / 0.00	151 / 2.47		24 / 0.68			0.0			223[e]	28	135	11	3		
8/2 1450	11	77	9.0	108	340	7.7	2.52[c]		22 / 0.96		0.0 / 0.00	140 / 2.29		35 / 0.99			0.0			207[e]	28	126	11	3		
9/6 1430	10	69	9.6	107	340	8.0	38 / 1.90	7.9 / 0.65	22 / 0.96	1.7 / 0.04	0.0 / 0.00	144 / 2.36	32 / 0.67	20 / 0.56	0.0 / 0.00	0.1 / 0.01	0.1	28	Fe 0.01 PO_4 0.75[d]	221[f]	27	127	9	2		
10/4 1440	13	62	9.8	101	346	7.7	2.36[c]		23 / 1.00		0.0 / 0.00	128 / 2.10		26 / 0.73			0.1			210[e]	30	118	13	25		
11/8 1320	14	55	12.3	117	393	7.9	2.88[c]		25 / 1.09		0.0 / 0.00	148 / 2.43		34 / 0.96			0.1			239[e]	27	144	23	1		
12/13 1215	25	46	11.1	94	395	7.6	2.90[c]		27 / 1.17		0.0 / 0.00	110 / 1.80		27 / 0.76			0.1			240[e]	29	145	55	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

32505-D-H 6-61 200 SPO

TABLE B - 3

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

SOQUEL CREEK AT SOQUEL (STA. 76)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 1630	25	48	10.5	90	603	7.9	4.48[c]		42 / 1.83		0.0 / 0.00	172 / 2.82		42 / 1.18			0.1			380[e]	29	224	83	85	Median 23.	
2/3 1605	102	50	10.4	92	403	7.5	3.18[c]		24 / 1.04		0.0 / 0.00	119 / 1.95		30 / 0.85			0.1			254[e]	25	159	61	100	Maximum 7,000.	
3/2 1520	19	58	10.0	98	652	7.9	5.12[c]		41 / 1.78		0.0 / 0.00	212 / 3.47		37 / 1.04			0.1			411[e]	26	256	82	6	Minimum 2.3	
4/12 1550	12	67	8.3	90	667	7.9	5.20[c]		42 / 1.83		0.0 / 0.00	226 / 3.70		46 / 1.30			2.2			421[e]	26	260	75	500		
5/3 1345	12	62	10.2	104	657	7.9	70 / 3.49	20 / 1.67	48 / 2.09	5.2 / 0.13	0.0 / 0.00	228 / 3.74	101 / 2.10	48 / 1.35	0.3 / 0.00	0.1 / 0.01	0.1	28	Fe 0.06 Al 0.17[d] PO_4 0.35 Cu 0.02 Zn 0.02	433[f]	28	258	71	4		
6/7 1450	5.3	73	11.5	132	732	8.1	6.60[c]		54 / 2.35		16 / 0.53	219 / 3.59		72 / 2.03			0.1			462[e]	26	330	124	1		
7/12 1230	2.9	75	11.9	140	721	7.9	5.54[c]		43 / 1.87		11 / 0.37	230 / 3.77		64 / 1.80			0.2			455[e]	25	277	70	2		
8/2 1630	2.0	79	7.9	97	692	7.9	5.22[c]		45 / 1.96		8 / 0.27	230 / 3.77		72 / 2.03			0.0			437[e]	27	261	59	5		
9/6 1320	2.1	71	12.3	139	715	7.9	75 / 3.74	29 / 2.36	51 / 2.22	4.7 / 0.12	12 / 0.40	232 / 3.80	100 / 2.08	72 / 2.03	0.2 / 0.00	0.2 / 0.01	0.0	36	Fe 0.04 Al 0.08[d] PO_4 0.35 Zn 0.05	494[f]	26	305	95	2		
10/4 1600	2.5	68	9.8	107	719	7.9	5.50[c]		36 / 1.57		12 / 0.40	216 / 3.54		58 / 1.64			0.3			454[e]	22	275	78	15		
11/8 1350	2.9	59	11.5	113	744	7.9	5.82[c]		51 / 2.22		0.0 / 0.00	248 / 4.06		74 / 2.09			0.2			469[e]	28	291	88	1		
12/13 1255	5.3	51	11.6	104	864	8.1	6.48[c]		65 / 2.83		6 / 0.20	239 / 3.92		86 / 2.43			0.2			545[e]	30	324	118	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 3

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

UVAS CREEK NEAR MORGAN HILL (STA. 96)

Date and time sampled P.S.T	Discharge in cfs Estimated	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in ppm / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/13 1310	0.1	47	11.6	99	395	7.7	3.76[c]		13 / 0.57		0.0 / 0.00	206 / 3.38		9.0 / 0.25			0.1			244[e]	13	188	19	27	Median 6.2	
2/4 1400	6.0	48	9.3	81	354	7.3	3.28[c]		11 / 0.48		0.0 / 0.00	176 / 2.88		8.0 / 0.23			0.0			218[e]	13	164	20	70	Maximum 130.	
3/3 1450	0.05	52	10.0	92	310	7.5	2.88[c]		9.4 / 0.41		16 / 0.53	150 / 2.46		6.2 / 0.17			0.1			191[e]	12	144	0	32	Minimum 0.06	
4/13 1315	7.0	63	12.3	128	270	7.9	2.62[c]		8.2 / 0.36		0.0 / 0.00	141 / 2.31		5.5 / 0.16			0.1			167[e]	12	131	15	4		
5/4 1155	9.0	61	12.9	132	253	7.8	26 / 1.30	12 / 1.02	8.0 / 0.35	1.5 / 0.04	0.0 / 0.00	136 / 2.23	23 / 0.48	3.2 / 0.09	0.4 / 0.01	0.1 / 0.01	0.1	19	Fe 0.13 Al 0.13[d] PO_4 0.10	160[f]	13	116	4	40		
6/8 1400	20	65	10.5	112	249	7.9	2.42[c]		8.2 / 0.36		0.0 / 0.00	140 / 2.29		6.0 / 0.17			0.1			154[e]	13	121	6	20		
7/13 1100	6.0	74	8.5	100	272	7.5	2.37[c]		8.4 / 0.37		0.0 / 0.00	145 / 2.38		12 / 0.34			0.1			168[e]	13	118	0	15		
8/3 1435	10	79	8.6	106	295	7.9	2.67[c]		9.1 / 0.40		0.0 / 0.00	160 / 2.62		3.9 / 0.11			0.1			182[e]	13	134	3	9		
9/6 1130	3.0	70	10.6	119	330	7.7	36 / 1.80	16 / 1.28	12 / 0.52	1.5 / 0.04	0.0 / 0.00	187 / 3.06	15 / 0.31	9.5 / 0.27	0.0 / 0.00	0.0 / 0.00	0.0	17	Fe 0.04 Zn 0.03[d] Al 0.09	199[f]	14	154	1	1		
10/5 1335	3.0	71	11.2	128	337	7.7	3.10[c]		10 / 0.44		0.0 / 0.00	180 / 2.95		5.5 / 0.16			0.1			208[e]	12	155	7	12		
11/9 1330	1.5	61	10.3	105	343	7.5	3.35[c]		11 / 0.48		10 / 0.33	170 / 2.79		5.2 / 0.15			0.1			212[e]	13	167	11	1		
12/14 1215	3.0	51	11.2	101	354	7.5	3.32[c]		11 / 0.48		0.0 / 0.00	178 / 2.92		8.5 / 0.24			0.0			218[e]	13	166	20	12		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER AT FAIR OAKS (STA. 22d)

Date and time sampled P.S.T.	Discharge in cfs Avg. M.D.	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										
1/1-15	640				77.6	6.8	8.0 / 0.40	2.9 / 0.24	2.8 / 0.12		0 / 0.00	34 / 0.56								47[g]	16	32	4			USGS
1/16-31	684				77.3	7.4	8.8 / 0.44	2.4 / 0.20	2.6 / 0.11		0 / 0.00	34 / 0.56								43[g]	15	32	4			
2/1-12	2,490				76.0	6.4	8.2 / 0.41	2.8 / 0.23	2.4 / 0.10		0 / 0.00	16 / 0.26								58[g]	14	32	19			
2/13-29	3,080				63.4	7.2	7.6 / 0.38	2.2 / 0.18	2.1 / 0.09		0 / 0.00	24 / 0.39								60[g]	14	28	8			
3/1-15	3,140				68.8	7.2	12 / 0.60	0.0 / 0.00	2.4 / 0.10		0 / 0.00	28 / 0.46								50[g]	14	30	7			
3/16-31	4,140				63.4	7.0	10 / 0.50	0.2 / 0.02	2.1 / 0.09		0 / 0.00	26 / 0.43								54[g]	15	26	5			
4/1-9	3,580				63.9	7.4	7.2 / 0.36	1.9 / 0.16	2.2 / 0.10		0 / 0.00	32 / 0.52								45[g]	16	26	0			
4/10-18	3,390				59.4	7.2	7.2 / 0.36	1.7 / 0.14	1.9 / 0.08		0 / 0.00	31 / 0.51								42[g]	14	25	0			
4/19-30	2,590				59.5	7.2	6.4 / 0.32	1.9 / 0.16	2.1 / 0.09		0 / 0.00	30 / 0.49								41[g]	16	24	0			
5/1-10	2,100				57.9	7.1	4.8 / 0.24	2.2 / 0.18	1.9 / 0.08		0 / 0.00	29 / 0.48								43[g]	16	21	0			
5/11-20	2,090				55.6	7.2	4.8 / 0.24	2.9 / 0.24	1.9 / 0.08		0 / 0.00	29 / 0.48								35[g]	14	24	0			
5/21-31	1,520				54.4	7.2	5.6 / 0.28	2.4 / 0.20	1.9 / 0.08		0 / 0.00	29 / 0.48								40[g]	14	24	0			
6/1-9	3,290				55.2	7.1	6.0 / 0.30	1.9 / 0.16	2.0 / 0.09		0 / 0.00	28 / 0.46								39[g]	16	23	0			
6/10-20	1,980				54.7	6.5	5.6 / 0.28	2.1 / 0.17	2.0 / 0.09		0 / 0.00	30 / 0.49								40[g]	17	22	0			
6/21-30	3,430				52.7	6.7	5.2 / 0.26	2.2 / 0.18	1.9 / 0.08		0 / 0.00	27 / 0.44								38[g]	15	22	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

32505-D-II 6-61 200 SPO

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER AT FAIR OAKS (STA. 22d continued)

Date and time sampled P.S.T.	Discharge in cfs Avg. M.D.	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										
7/1-11	3,460				52.7	7.6	5.6 / 0.28	1.5 / 0.12	2.1 / 0.09		0 / 0.00	25 / 0.41								46[g]	18	20	0			USGS
7/12-20	2,830				52.2	7.6	5.2 / 0.26	1.9 / 0.16	2.2 / 0.10		0 / 0.00	25 / 0.41								57[g]	19	21	1			
7/21-31	3,590				51.5	7.5	6.4 / 0.32	1.0 / 0.08	2.8 / 0.12		0 / 0.00	25 / 0.41								49[g]	23	20	0			
8/1-10	2,780				51.6	7.3	8.0 / 0.40	0.2 / 0.02	2.5 / 0.11		0 / 0.00	25 / 0.41								51[g]	21	21	1			
8/11-20	2,450				51.7	7.2	8.0 / 0.40	0.2 / 0.02	2.2 / 0.10		0 / 0.00	24 / 0.39								48[g]	19	21	1			
8/21-31	1,910				51.9	7.5	8.0 / 0.40	0.5 / 0.04	2.4 / 0.10		0 / 0.00	26 / 0.43								47[g]	19	22	1			
9/1-12	1,500				53.8	6.7	5.6 / 0.28	1.5 / 0.12	2.4 / 0.10		0 / 0.00	22 / 0.36								49[g]	20	20	2			
9/13-20	983				54.5	6.6	6.0 / 0.30	1.2 / 0.10	2.4 / 0.10		0 / 0.00	21 / 0.34								48[g]	20	20	3			
9/21-30	3,380				55.2	6.6	5.2 / 0.26	1.7 / 0.14	2.2 / 0.10		0 / 0.00	23 / 0.38								47[g]	20	20	1			
10/1-10	542				71	7.8	6.5 / 0.32	2.8 / 0.23	3.9 / 0.17		0 / 0.00	37 / 0.61								61[g]	24	28	0			
10/11-20	545				71	7.8	6.3 / 0.31	2.8 / 0.23	4.2 / 0.18		0 / 0.00	37 / 0.61								60[g]	25	27	0			
10/21-31	555				63	7.6	6.2 / 0.31	2.3 / 0.19	2.9 / 0.13		0 / 0.00	31 / 0.51								52[g]	21	25	0			
11/1-10	1,010				64	7.2	6.0 / 0.30	2.9 / 0.24	2.7 / 0.12		0 / 0.00	32 / 0.52								54[g]	18	27	1			
11/11-21	1,100				64	7.2	6.3 / 0.31	2.4 / 0.20	3.1 / 0.13		0 / 0.00	32 / 0.52								53[g]	20	26	0			
11/22-30	1,150				65	7.3	6.7 / 0.33	2.6 / 0.21	2.7 / 0.12		0 / 0.00	33 / 0.54								56[g]	18	27	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER AT FAIR OAKS (STA. 22d continued)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										
12/1-10	1,580				67.1	6.4	6.4 / 0.32	2.4 / 0.20	2.6 / 0.11		0 / 0.00	26 / 0.43								51[g]	17	26	5			USGS
12/11-20	2,180				67.6	6.5	7.2 / 0.36	2.4 / 0.20	2.6 / 0.11		0 / 0.00	28 / 0.46								48[g]	16	28	5			
12/21-31	2,660				66.5	6.7	8.0 / 0.40	1.5 / 0.12	2.6 / 0.11		0 / 0.00	28 / 0.46								56[g]	17	26	3			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER AT FAIR OAKS (STA. 22d)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25° C)	pH[b]	Mineral constituents in parts per million / equivalents per million													Total dissolved solids[g] in ppm	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
			ppm	%Sat			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents			Total ppm	N.C. ppm			
1960																										
1/6 1000		47			81	7.9	7.8	2.4	2.3	0.8	0.0	24	12	2.5	0.6					62	14					USBR
3/24 1035		52			59	7.5	8.4	2.1	2.3	0.0	0.0	27	1.9	3.6	0.0					42	14					
6/29 1030		59			51	7.8	5.6	1.6	2.1	0.4	0.0	23	7.2	0.0	0.0					36	18					
9/16 1430		68			55	6.6	5.8	2.1	2.5	0.0	0.0	21	3.4	3.2	0.6					32	19					
12/15 1115		55			73	6.7	7.4	2.2	2.1	0.4	0.0	25	9.1	4.3	0.6					56	12					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER, MIDDLE FORK NEAR AUBURN (STA. 22b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/6 1100	65	38	12.9	98	95.0	7.3	0.80[c]		3.6 / 0.16		0.0 / 0.00	34 / 0.56		6.2 / 0.17			0.0			73[e]	17	40	12	10	Maximum 230 Minimum 0.06 Median 2.3	
2/15 1615	1,000	45	12.1	102	49.4	7.1	0.40[c]		1.5 / 0.07		0.0 / 0.00	19 / 0.31		4.4 / 0.12			0.0			38[e]	15	20	4	15		
3/3 1320	390	45	11.7	99	56.9	7.0	0.44[c]		1.9 / 0.08		0.0 / 0.00	26 / 0.43		2.0 / 0.06			0.0			43[e]	15	22	1	2		
4/8 1145	4,000	51	11.4	102	24.7	6.8	0.24[c]		0.9 / 0.04		0.0 / 0.00	13 / 0.21		1.5 / 0.04			0.0			19[e]	14	12	1	4		
5/9 0950	2,970	53	10.5	96	27.0	6.8	2.0 / 0.10	1.3 / 0.11	1.0 / 0.04	0.2 / 0.01	0.0 / 0.00	14 / 0.23	0.4 / 0.01	0.8 / 0.02	0.1 / 0.00	0.0 / 0.00	0.0	10	Fe 0.01 Cu 0.01[d] Al 0.01 PO_4 0.05	23[f]	15	10	0	5		
6/3 1125	2,430	64	9.5	99	25.0	7.1	0.18[c]		1.0 / 0.04		0.0 / 0.00	12 / 0.20		0.6 / 0.02			0.0			19[e]	18	9	0	8		
7/7 0930	198	76	7.8	92	55.4	7.1	0.43[c]		1.7 / 0.07		0.0 / 0.00	26 / 0.43		3.8 / 0.11			0.0			42[e]	14	22	1	2		
8/12 0835	61	78	7.6	91	79.2	7.3	0.60[c]		3.7 / 0.16		0.0 / 0.00	34 / 0.56		4.8 / 0.14			0.0			61[e]	21	30	2	5		
9/14 0930	46	73	8.3	95	89.5	7.3	9.6 / 0.48	2.9 / 0.24	4.3 / 0.19	0.8 / 0.02	0.0 / 0.00	41 / 0.67	5.4 / 0.11	4.5 / 0.13	0.1 / 0.00	0.0 / 0.00	0.0	14	PO_4 0.05[d]	62[f]	20	36	2	1		
10/7 1030	49	70	8.6	96	93.1	7.3	0.76[c]		3.0 / 0.13		0.0 / 0.00	38 / 0.62		5.5 / 0.16			0.1			71[e]	15	38	7	10		
11/3 1035	62	59	9.3	91	91.8	7.1	0.72[c]		2.9 / 0.13		0.0 / 0.00	36 / 0.59		5.0 / 0.14			0.0			70[e]	15	36	6	1		
12/8 1035	208	40	13.1	101	72.0	7.1	0.60[c]		2.6 / 0.11		0.0 / 0.00	34 / 0.56		2.5 / 0.07			0.0			55[e]	15	30	2	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER AT NIMBUS DAM (STA. 22a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/7 1415	566	48	11.4	98	81.5	7.3	0.72[c]		3.2 / 0.14		0.0 / 0.00	32 / 0.52		3.8 / 0.11			0.0			54[e]	16	36	10	15	Maximum 7,000 Minimum 0.62 Median 23.	
2/15 1350	3,440	48	11.0	95	62.2	7.1	0.49[c]		1.8 / 0.08		0.0 / 0.00	24 / 0.39		4.8 / 0.14			0.1			41[e]	14	25	5	140		
3/11 1430	5,060	49	10.9	95	67.7	7.0	0.68[c]		1.9 / 0.08		0.0 / 0.00	32 / 0.52		4.0 / 0.11			0.0			45[e]	11	34	8	15		
4/7 0845	3,570	51	10.7	96	59.5	7.1	0.56[c]		1.7 / 0.07		0.0 / 0.00	28 / 0.46		3.5 / 0.10			0.1			40[e]	11	28	5	10		
5/6 1115	2,100	56	10.6	101	58.4	7.0	6.0 / 0.30	2.2 / 0.18	2.3 / 0.10	0.6 / 0.02	0.0 / 0.00	28 / 0.46	1.0 / 0.02	4.5 / 0.13	0.3 / 0.00	0.1 / 0.01	0.1	12	Fe 0.04 Al 0.08[d] PO_4 0.05 Cu 0.01	43[f]	17	24	1	3		
6/3 0625	4,080	57	10.1	97	51.5	7.0	0.42[c]		1.5 / 0.07		0.0 / 0.00	25 / 0.41		1.0 / 0.03			0.1			34[e]	14	21	1	12		
7/8 0935	3,490	57	9.4	90	50.2	7.1	0.39[c]		1.5 / 0.07		0.0 / 0.00	24 / 0.39		2.2 / 0.06			0.1			33[e]	15	20	0	2		
8/11 0830	2,470	60	8.3	83	50.0	6.9	0.56[c]		1.9 / 0.08		0.0 / 0.00	24 / 0.39		2.5 / 0.07			0.0			33[e]	12	28	8	7		
9/9 1300	1,530	63	6.5	67	50.4	6.8	4.8 / 0.24	1.8 / 0.15	2.0 / 0.09	0.7 / 0.02	0.0 / 0.00	27 / 0.44	1.0 / 0.02	1.0 / 0.03	0.2 / 0.00	0.0 / 0.00	0.0	12	PO_4 0.10 Cu 0.01[d]	36[f]	18	20	0	1		
10/7 1005	552	66	7.5	80	57.7	6.8	0.48[c]		2.1 / 0.09		0.0 / 0.00	25 / 0.41		5.8 / 0.16			0.0			38[e]	16	24	4	10		
11/4 1230	1,040	62	8.8	89	60.8	7.1	0.50[c]		2.4 / 0.10		0.0 / 0.00	27 / 0.44		2.8 / 0.08			0.1			40[e]	17	25	3	3		
12/19 1225	2,160	54	9.8	91	65.9	7.1	0.58[c]		2.3 / 0.10		0.0 / 0.00	34 / 0.56		1.5 / 0.04			0.0			44[e]	15	29	1	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER AT SACRAMENTO (STA. 22)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Not Rated																									USGS
1/8 0800		47	10.6	90	77.2	7.3	0.72[c]		3.1 / 0.13		0.0 / 0.00	32 / 0.52		3.5 / 0.10			0.0			55[e]	15	36	10	20	Maximum >7,000 Minimum 0.23 Median 6.2	
2/16 1305		50	10.8	95	60.5	7.1	0.49[c]		1.8 / 0.08		0.0 / 0.00	24 / 0.39		4.0 / 0.11			0.0			43[e]	14	24	4	140		
3/4 1300		50	11.2	98	66.7	7.1	0.60[c]		1.9 / 0.08		0.0 / 0.00	30 / 0.49		2.0 / 0.06			0.0			47[e]	12	30	5	10		
4/7 0945		52	10.7	97	61.0	7.1	0.60[c]		1.9 / 0.08		0.0 / 0.00	30 / 0.49		3.0 / 0.08			0.1			43[e]	12	30	5	10		
5/6 1315		58	10.6	103	56.5	7.3	6.4 / 0.32	2.4 / 0.20	1.9 / 0.08	0.5 / 0.01	0.0 / 0.00	30 / 0.49	2.0 / 0.04	3.0 / 0.08	0.2 / 0.00	0.1 / 0.01	0.1	12	Fe 0.05 Al 0.07[d] PO_4 0.05	44[f]	13	26	1	5		
6/3 1345		62	9.9	101	53.5	7.0	0.44[c]		1.6 / 0.07		0.0 / 0.00	25 / 0.41		2.4 / 0.07			0.1			38[e]	14	22	2	18		
7/8 1225		61	10.0	101	50.1	7.1	0.44[c]		1.4 / 0.06		0.0 / 0.00	27 / 0.44		1.5 / 0.04			0.0			36[e]	12	22	0	1		
8/11 0715		60	8.5	85	51.5	6.9	0.52[c]		1.9 / 0.08		0.0 / 0.00	25 / 0.41		2.0 / 0.06			0.1			37[e]	13	26	6	6		
9/9 1435		67	8.4	91	53.2	7.1	5.2 / 0.26	1.8 / 0.15	2.2 / 0.10	0.7 / 0.02	0.0 / 0.00	28 / 0.46	2.0 / 0.04	1.2 / 0.03	0.3 / 0.00	0.0 / 0.00	0.0	12	PO_4 0.10 Cu 0.01[d]	39[f]	19	20	0	1		
10/7 1100		68	9.2	100	57.5	7.1	0.48[c]		2.1 / 0.09		0.0 / 0.00	27 / 0.44		3.2 / 0.09			0.0			41[e]	16	24	2	15		
11/4 1415		61	9.7	98	62.0	7.3	0.50[c]		2.0 / 0.09		0.0 / 0.00	30 / 0.49		1.2 / 0.03			0.0			44[e]	15	25	0	5		
12/19 1445		54	10.6	98	65.6	7.3	0.58[c]		2.3 / 0.10		0.0 / 0.00	34 / 0.56		2.2 / 0.06			0.0			47[e]	15	29	1	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER, SOUTH FORK NEAR LOTUS (STA. 22c)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/6 0950	130	34	13.3	95	75.2	7.1	—/0.60[c]		3.9/0.17		0.0/0.00	28/0.46		6.0/0.17			0.0			60[e]	22	30	7	20	Maximum 2400	
2/15 1510	790	44	11.8	98	51.8	7.1	—/0.38[c]		2.1/0.09		0.0/0.00	19/0.31		3.9/0.11			0.1			41[e]	19	19	3	25	Minimum	
3/3 1205	338	43	11.9	97	55.9	7.1	—/0.50[c]		2.5/0.11		0.0/0.00	26/0.43		4.0/0.11			0.0			44[e]	18	25	4	4	Median	
4/8 1015	2640	52	10.8	98	28.2	7.0	—/0.26[c]		1.0/0.04		0.0/0.00	14/0.23		1.5/0.04			0.1			22[e]	13	13	1	5		
5/9 1100	2050	57	10.0	96	25.6	7.1	1.8/0.09	0.9/0.07	1.3/0.06	0.4/0.01	0.0/0.00	13/0.21	0.4/0.01	0.4/0.01	0.0/0.00	0.0/0.00	0.0	9.8	Fe 0.02 Zn 0.01[d] Al 0.06 PO_4 0.00	21[f]	26	8	0	10		
6/3 0905	1620	65	8.9	94	22.0	7.0	—/0.16[c]		1.0/0.04		0.0/0.00	11/0.18		0.4/0.01			0.0			17[e]	20	8	0	25		
7/7 0810	192	76	7.3	86	49.7	7.1	—/0.35[c]		2.2/0.10		0.0/0.00	24/0.39		4.8/0.14			0.0			39[e]	22	18	0	2		
8/12 0945	135	78	7.5	90	53.7	7.3	—/0.40[c]		3.5/0.15		0.0/0.00	24/0.39		5.5/0.16			0.0			43[e]	27	20	0	10		
9/14 0755	126	69	8.1	89	60.7	7.3	2.0/0.10	4.6/0.38	4.3/0.19	0.8/0.02	0.0/0.00	30/0.49	4.6/0.10	4.2/0.12	0.2/0.00	0.0/0.00	0.0	13	Fe 0.05 PO_4 0.00[d]	49[f]	28	24	0	1		
10/7 1145	307	67	8.7	94	55.8	7.3	—/0.40[c]		2.7/0.12		0.0/0.00	20/0.33		4.8/0.14			0.1			44[e]	23	20	4	15		
11/3 1035	130	54	10.0	93	56.6	7.1	—/0.42[c]		2.8/0.12		0.0/0.00	24/0.39		4.0/0.11			0.1			45[e]	22	21	1	3		
12/8 0915	222	36	13.1	95	68.3	7.2	—/0.56[c]		3.3/0.14		0.0/0.00	32/0.52		3.0/0.08			0.0			54[e]	20	28	2	35		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

ANTELOPE CREEK NEAR MOUTH (STA. 88c)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/11 1600	40 est.	46	10.7	89	210	7.3	1.32[c]		17 / 0.74		0.0 / 0.00	76 / 1.25		22 / 0.62			0.6			154[e]	36	66	4	35		
2/1 1440	800 est.	51	9.6	86	64.4	7.0	0.52[c]		2.2 / 0.10		0.0 / 0.00	22 / 0.36		1.5 / 0.04			0.0			47[e]	16	26	8	400		
3/7 1100	21 est.	50	9.8	86	131	7.3	1.04[c]		6.7 / 0.29		0.0 / 0.00	63 / 1.03		6.2 / 0.17			0.2			96[e]	22	52	0	25		
4/11 1130	15 est.	57	10.1	97	139	7.3	0.92		9.6 / 0.42		0.0 / 0.00	52 / 0.85		9.0 / 0.25			0.4			102[e]	31	46	3	8		
5/10 0930	15 est.	63	8.8	91	132	7.2	9.6 / 0.48	5.1 / 0.42	10 / 0.44	2.3 / 0.06	0.0 / 0.00	50 / 0.82	15 / 0.31	10 / 0.28	0.7 / 0.01	0.2 / 0.01	1.0	31	Al 0.18 Fe 0.03[d] PO_4 0.15	109[f]	29	45	4	10		
6/13 0950	2.5 est.	76	6.8	80	209	7.3	1.72[c]		10 / 0.44		0.0 / 0.00	92 / 1.51		10 / 0.28			0.3			154[e]	21	86	11	5		
7/12 0800	30 est.	70	7.0	78	212	7.2	1.38[c]		19 / 0.83		0.0 / 0.00	82 / 1.34		18 / 0.51			0.5			156[e]	38	69	2	4		
8/3 0845	10 est.	71	6.5	73	269	7.3	1.90[c]		17 / 0.74		0.0 / 0.00	122 / 2.00		17 / 0.48			0.5			198[e]	28	95	0	90		
9/13 0750	5 est.	68	6.4	70	263	7.2	16 / 0.80	10 / 0.82	19 / 0.83	6.7 / 0.17	0.0 / 0.00	100 / 1.64	19 / 0.40	24 / 0.68	0.0 / 0.00	0.0 / 0.00	0.5	40	Al 0.28 Zn 0.01[d] PO_4 0.50	184[f]	32	81	0	15		
10/11 1255	12 est.	58	10.2	99	246	7.3	1.38[c]		21 / 0.91		0.0 / 0.00	69 / 1.13		27 / 0.76			0.8			181[e]	40	69	12	10		
11/2 1030	15 est.	55	10.2	96	234	7.3	1.44[c]		20 / 0.87		0.0 / 0.00	82 / 1.34		20 / 0.56			0.7			172[e]	38	72	5	10		
12/6 1020	16 est.	43	10.9	87	174	7.1	1.46[c]		9.3 / 0.40		0.0 / 0.00	88 / 1.44		8.5 / 0.24			0.1			128[e]	22	73	1	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

ANTELOPE CREEK NEAR RED BLUFF (STA. 88e)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/11 1645	82	45	11.8	98	154	7.4	1.18[c]		10 / 0.44		0.0 / 0.00	81 / 1.33		9.0 / 0.25			0.2			124[e]	27	59	0	3		
2/1 1600	3,060	50	10.1	89	69.0	7.1	0.56[c]		2.5 / 0.11		0.0 / 0.00	20 / 0.33		2.0 / 0.06			0.0			55[e]	16	28	12	50		
3/7 1120	1,090	51	10.6	95	85.4	7.3	0.70[c]		3.7 / 0.16		0.0 / 0.00	43 / 0.70		3.8 / 0.11			0.0			69[e]	19	35	0	25		
4/11 1200	105	58	10.5	102	92.4	7.7	0.72[c]		5.1 / 0.22		0.0 / 0.00	53 / 0.87		2.5 / 0.07			0.1			74[e]	23	36	0	1		
5/10 1010	82	65	9.7	102	105	7.7	8.0 / 0.40	5.4 / 0.44	5.7 / 0.25	1.2 / 0.03	0.0 / 0.00	59 / 0.97	0.0 / 0.00	5.5 / 0.16	0.6 / 0.01	0.1 / 0.01	0.1	32	Al 0.12 Fe 0.01[d] PO_4 0.05	88[f]	22	42	0	25		
6/13 1020	45	78	8.3	100	139	7.9	1.18[c]		8.7 / 0.38		0.0 / 0.00	76 / 1.25		6.5 / 0.18			0.1			112[e]	24	59	0	3		
7/12 0840	34	74	8.1	94	162	7.7	1.18[c]		15 / 0.65		0.0 / 0.00	90 / 1.48		12 / 0.34			0.2			130[e]	36	59	0	1		
8/2	Not Sampled -- Locked Out																									
9/13	Not Sampled -- Locked Out																									
10/11 1205	34	58	10.6	103	167	7.7	1.30[c]		10 / 0.44		0.0 / 0.00	89 / 1.46		10 / 0.28			0.1				25	65	0	2		
11/2 0945	34	54	10.9	101	169	7.7	1.28[c]		11 / 0.48		0.0 / 0.00	87 / 1.43		8.0 / 0.23			0.2				27	64	0	3		
12/6 0955	90	40	11.5	89	126	7.3	1.02[c]		7.6 / 0.33		0.0 / 0.00	68 / 1.11		6.2 / 0.17			0.0				24	51	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

BATTLE CREEK NEAR COTTONWOOD (STA. 88b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/14 1030	286	42	11.5	91	147	7.8	1.14[c]		8.8 / 0.38		0.0 / 0.00	88 / 1.44		3.5 / 0.10			0.0			128[e]	25	57	0	2		
2/24 1410	730	48	11.0	94	123	8.0	1.14[c]		7.2 / 0.31		0.0 / 0.00	77 / 1.26		3.5 / 0.10			0.1			107[e]	21	57	0	35		
3/7 1420	2,980	53	10.0	91	67.6	7.2	0.52[c]		2.7 / 0.12		0.0 / 0.00	37 / 0.61		1.2 / 0.03			0.1			59[e]	19	26	0	125		
4/11 1525	344	57	10.0	96	117	7.5	0.96[c]		5.6 / 0.24		0.0 / 0.00	66 / 1.08		3.0 / 0.08			0.0			102[e]	20	48	0	15		
5/11 1000	405	59	9.9	98	108	7.3	7.6 / 0.38	6.6 / 0.54	5.7 / 0.25	2.1 / 0.05	0.0 / 0.00	66 / 1.08	3.0 / 0.06	2.5 / 0.07	0.7 / 0.01	0.1 / 0.01	0.0	38	Al 0.13 Fe 0.01[d] PO_4 0.15	99[f]	20	46	0	25		
6/13 1320	297	68	9.2	100	116	7.9	0.96[c]		5.6 / 0.24		0.0 / 0.00	29 / 0.48		0.5 / 0.01			0.1			101[e]	20	48	24	4		
7/12 1215	175	64	10.0	104	142	7.9	1.08[c]		16 / 0.70		0.0 / 0.00	88 / 1.44		8.5 / 0.24			0.1			124[e]	39	54	0	1		
8/8 0950	525	63	9.5	98	149	7.7	1.16[c]		8.8 / 0.38		0.0 / 0.00	94 / 1.54		1.0 / 0.03			0.1			130[e]	25	58	0	1		
9/5 1215	147	65	10.1	106	149	7.9	11 / 0.55	7.4 / 0.61	11 / 0.48	2.4 / 0.06	0.0 / 0.00	95 / 1.56	4.0 / 0.08	2.2 / 0.06	0.2 / 0.00	0.0 / 0.00	0.0	49	Fe 0.01 PO_4 0.10[d] Al 0.05	134[f]	28	58	0	3		
10/10 1300	179	54	10.5	97	149	7.7	1.18[c]		8.5 / 0.37		0.0 / 0.00	87 / 1.43		4.0 / 0.11			0.0			130[e]	24	59	0	2		
11/7 1245	171	56	10.9	104	154	7.7	1.16[c]		9.2 / 0.40		0.0 / 0.00	89 / 1.46		0.5 / 0.01			0.1			134[e]	26	58	0	4		
12/12 1140	255	47	11.6	99	140	7.5	1.14[c]		8.5 / 0.37		0.0 / 0.00	86 / 1.41		3.0 / 0.08			0.0			122[e]	25	57	0	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

BEAR CREEK AT MERCED (STA. 111a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/4 1700	5 (est.)	42	12.4	98	312	8.3	29 / 1.45	16 / 1.33	17 / 0.74	0.7 / 0.02	6 / 0.20	178 / 2.92	11 / 0.23	5.5 / 0.16	0.0 / 0.00	0.0 / 0.00	0.0	23	Tot. Alk. 190	196[f]	21	139	0			
2/2 1300		54	9.5	88	233	7.4	/ 1.96[c]		10 / 0.44		0.0 / 0.00	98 / 1.61		10 / 0.28			0.0			149[e]	18	98	18	100		
3/2 0730		48	10.9	94	301	7.8	28 / 1.40	17 / 1.36	13 / 0.57	1.3 / 0.03	0.0 / 0.00	150 / 2.46	26 / 0.54	11 / 0.31	0.3 / 0.00	0.1 / 0.01	0.0	23		194[f]	17	138	15			
4/4 1605		78	9.2	111	228	7.9	/ 1.92[c]		9.1 / 0.40		0.0 / 0.00	122 / 2.00		7.4 / 0.21			0.0			146[e]	17	96	0	15		
5/2 1900		69	9.5	104	111	7.3	11 / 0.55	4.7 / 0.39	4.2 / 0.18	0.8 / 0.02	0.0 / 0.00	58 / 0.95	5.0 / 0.10	3.5 / 0.10	0.6 / 0.01	0.1 / 0.01	0.0	13	Fe 0.01 Cu 0.01[d] Al 0.05 PO_4 0.05	72[f]	16	47	0	7		
6/1 0925		77	8.1	96	122	7.3	/ 1.12[c]		4.6 / 0.20		0.0 / 0.00	68 / 1.11		4.0 / 0.11			0.1			78[e]	15	56	0	35		
7/5 1745		81	11.0	135	95.5	8.1	/ 0.84[c]		3.5 / 0.15		0.0 / 0.00	59 / 0.97		0.4 / 0.01			0.0			62[e]	15	42	0	15		
8/10 1115		74	6.9	80	121	7.5	/ 0.99[c]		5.0 / 0.22		0.0 / 0.00	67 / 1.10		1.4 / 0.04			0.0			78[e]	18	50	0	20		
9/6 1345		79	10.7	130	221	7.7	19 / 0.95	10 / 0.85	11 / 0.48	1.3 / 0.03	0.0 / 0.00	121 / 1.98	15 / 0.31	3.5 / 0.10	0.2 / 0.00	0.1 / 0.01	0.0	30	Al 0.08 Zn 0.02[d] PO_4 0.15	150[f]	21	90	0	6		
10/6 1045	5 (est.)	76	10.1	120	300	7.9	/ 2.56[c]		16 / 0.70		3 / 0.10	169 / 2.77		3.7 / 0.10			0.0		Tot. Alk. 175	193[e]	21	128	0	50		
11/2 1250		62	12.1	123	320	7.9	/ 2.58[c]		24 / 1.04		4 / 0.13	180 / 2.95		5.2 / 0.15			0.0		Tot. Alk. 188	206[e]	27	129	0	9		
12/14 0720		46	10.9	91	282	7.9	/ 2.78[c]		15 / 0.65		4 / 0.13	170 / 2.79		8.8 / 0.25			0.0		Tot. Alk. 178	182[e]	19	139	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

BEAR RIVER AT MOUTH (STA. 20b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/7	Dry -- Not Sampled																									
2/16 0850		47	10.5	89	126	7.1	14 / 0.70	4.6 / 0.38	3.7 / 0.16	1.1 / 0.03	0.0 / 0.00	44 / 0.72	16 / 0.33	6.0 / 0.17	0.6 / 0.01	0.2 / 0.01	0.0	22		90[f]	13	54	18			
3/4 1115		52	10.7	97	232	7.7	22 / 1.10	10 / 0.86	8.5 / 0.37	1.6 / 0.04	0.0 / 0.00	90 / 1.48	29 / 0.60	10 / 0.28	0.4 / 0.01	0.0 / 0.00	0.0	29		154[f]	16	98	24			
4/5 1200		62	9.4	96	98.8	7.3	9.6 / 0.48	4.4 / 0.36	2.9 / 0.13	1.3 / 0.03	0.0 / 0.00	38 / 0.62	11 / 0.23	4.0 / 0.11	1.3 / 0.02	0.2 / 0.01	0.0	10		64[f]	13	42	11			
5/9 1030		69	8.4	93	152	7.3	14 / 0.70	7.3 / 0.60	4.8 / 0.21	1.0 / 0.03	0.0 / 0.00	66 / 1.08	17 / 0.35	6.2 / 0.17	0.0 / 0.00	0.0 / 0.00	0.1	16	Al 0.06 Cu 0.01[d] PO_4 0.05 Zn 0.02	99[f]	14	65	11	10		
6/2 1315	35 (est.)	83	7.6	96	184	7.4	1.46[c]		7.5 / 0.33		0.0 / 0.00	79 / 1.29		10 / 0.28			0.1			118[e]	18	73	8	12		
7/8	Dry -- Not Sampled																									
8/11	Dry -- Not Sampled																									
9/15	Dry -- Not Sampled																									
10/3	Dry -- Not Sampled																									
11/4	Dry -- Not Sampled																									
12/19 0950	40 (est.)	50	10.8	95	199	7.3	1.68[c]		6.5 / 0.28		0.0 / 0.00	78 / 1.28		11 / 0.34			0.0			128[e]	14	84	20	50		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

BEAR RIVER NEAR WHEATLAND (STA. 78)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/6 1630	19	44	12.4	101	316	7.7	2.80[c]		9.0 / 0.39		0.0 / 0.00	107 / 1.75		16 / 0.45			0.1			200[e]	12	140	52	10	Maximum 2,400 Minimum 0.23 Median 6.2	
2/12 1740	890	49	11.6	101	97.6	7.0	0.82[c]		2.2 / 0.10		0.0 / 0.00	31 / 0.51		4.0 / 0.11			0.0			62[e]	11	41	16	350		
3/4 1010	14	53	10.8	99	278	7.3	2.52[c]		5.3 / 0.23		0.0 / 0.00	104 / 1.70		6.5 / 0.18			0.0			176[e]	8	126	41	4		
4/5 1345	405	61	10.2	102	92.8	7.3	0.82[c]		2.3 / 0.10		0.0 / 0.00	36 / 0.59		4.5 / 0.13			0.0			59[e]	11	41	11	25		
5/9 0935	51	67	9.0	97	126	7.3	13 / 0.65	6.3 / 0.52	2.8 / 0.12	0.6 / 0.02	0.0 / 0.00	57 / 0.93	12 / 0.25	3.5 / 0.10	0.0 / 0.00	0.1 / 0.01	0.0	15	Al 0.03 Zn 0.01[d] PO_4 0.05	81[f]	9	59	12	10		
6/3 1005	44	79	7.5	91	140	7.5	1.20[c]		3.1 / 0.13		0.0 / 0.00	60 / 0.98		5.5 / 0.16			0.0			89[e]	10	60	11	30		
7/7 1430	2.3	92	10.0	137	288	8.1	2.72[c]		6.5 / 0.28		8 / 0.27	125 / 2.05		16 / 0.45			0.0		Tot. Alk. 141	182[e]	9	136	20	1		
8/11 1045	1.5	80	8.1	100	322	7.7	3.04[c]		7.6 / 0.33		0.0 / 0.00	152 / 2.49		12 / 0.34			0.0			204[e]	10	152	27	1		
9/14 1210	4.4	81	10.1	125	319	7.9	32 / 1.60	20 / 1.62	8.8 / 0.38	1.2 / 0.03	0.0 / 0.00	153 / 2.51	36 / 0.75	16 / 0.45	0.1 / 0.00	0.0 / 0.00	0.0	12	Fe 0.02 Zn 0.04[d] Al 0.06 PO_4 0.00	210[f]	10	161	36	2		
10/3 0920	4.0	67	8.2	88	324	7.5	3.10[c]		6.5 / 0.28		0.0 / 0.00	143 / 2.34		14 / 0.39			0.0			205[e]	8	155	38	1		
11/3 1600	1.2	58	9.5	92	328	7.7	3.14[c]		8.4 / 0.37		0.0 / 0.00	146 / 2.39		12 / 0.34			0.1			208[e]	11	157	37	2		
12/8 1225	253	44	12.7	103	109	7.3	0.92[c]		4.1 / 0.18		0.0 / 0.00	43 / 0.70		1.5 / 0.04			0.0			69[e]	16	46	11	40		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

BIG CHICO CREEK NEAR CHICO (STA. 85)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/11 1050	108	45	12.1	100	181	7.3	1.28[c]		13 / 0.57		0.0 / 0.00	78 / 1.28		12 / 0.34			0.2			132[e]	31	64	0	10	Median 14.6	
2/1 1055	204	50	10.6	93	91.2	7.2	0.72[c]		5.3 / 0.23		0.0 / 0.00	40 / 0.66		5.0 / 0.14			0.0			67[e]	24	36	3	125	Maximum 620.	
3/9 0955	564	48	11.6	100	73.6	7.1	0.58[c]		2.7 / 0.12		0.0 / 0.00	38 / 0.62		3.6 / 0.10			0.1			55[e]	17	29	0	18	Minimum 0.23	
4/13 0930	69	52	10.8	98	140	7.5	1.12[c]		7.1 / 0.31		0.0 / 0.00	74 / 1.21		6.5 / 0.18			0.0			102[e]	22	56	0	15		
5/9 0935	65	59	10.0	98	142	7.5	12 / 0.60	8.0 / 0.66	7.5 / 0.33	0.9 / 0.02	0.0 / 0.00	80 / 1.31	5.0 / 0.10	5.5 / 0.16	0.0 / 0.00	0.1 / 0.01	0.1	36	Al 0.03 Zn 0.01[d] PO_4 0.05	114[f]	20	63	0	10		
6/15 1025	30	74	8.3	96	186	7.7	1.40[c]		11 / 0.48		0.0 / 0.00	101 / 1.66		8.0 / 0.23			0.2			136[e]	26	70	0	2		
7/11 0940	21	71	8.6	97	207	7.9	1.50[c]		18 / 0.78		0.0 / 0.00	115 / 1.88		14 / 0.39			0.2			151[e]	34	75	0	1		
8/2 0915	22	70	8.5	95	210	7.7	1.56[c]		15 / 0.65		0.0 / 0.00	114 / 1.87		10 / 0.28			0.3			153[e]	29	78	0	1		
9/12 0840	20	70	8.5	95	217	7.9	18 / 0.90	8.8 / 0.72	16 / 0.70	1.3 / 0.03	0.0 / 0.00	118 / 1.93	0.0 / 0.00	16 / 0.45	0.0 / 0.00	0.0 / 0.00	0.2	41	Fe 0.03 Al 0.05[d] PO_4 0.05	159[f]	30	81	0	1		
10/10 1145	23	57	10.6	102	203	7.7	1.48[c]		13 / 0.57		0.0 / 0.00	102 / 1.67		14 / 0.39			0.1			148[e]	28	74	0	1		
11/1 1035	23	55	10.6	99	217	7.7	1.52[c]		16 / 0.70		0.0 / 0.00	113 / 1.85		8.5 / 0.24			0.3			158[e]	32	76	0	2		
12/5 0940	122	43	12.3	99	109	7.3	0.86[c]		6.2 / 0.27		0.0 / 0.00	57 / 0.93		4.8 / 0.14			0.0			80[e]	24	43	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

BIG CHICO CREEK AT CHICO (STA. 85a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/11 1425	76	45	11.7	97	168	7.3	14 / 0.70	6.8 / 0.56	11 / 0.48	1.4 / 0.04	0.0 / 0.00	81 / 1.33	6.0 / 0.12	12 / 0.34	0.0 / 0.00	0.4 / 0.02	0.2	34		126[f]	27	63	0			
2/1 1145	32	51	10.0	89	92.8	7.2	— / 0.72[c]		4.8 / 0.21		0.0 / 0.00	36 / 0.59		5.5 / 0.16			0.0			70[e]	23	36	60			
3/8 1620	554	52	10.7	97	66.3	7.1	— / 0.55[c]		2.6 / 0.11		0.0 / 0.00	32 / 0.52		2.5 / 0.07			0.0			50[e]	17	27	1	50		
4/13 1000	40	55	10.4	98	141	7.5	— / 1.08[c]		7.3 / 0.32		0.0 / 0.00	72 / 1.18		8.8 / 0.25			0.0			106[e]	23	54	0	15		
5/9 1030	41	62	9.6	98	143	7.5	12 / 0.60	6.1 / 0.50	8.1 / 0.35	0.9 / 0.02	0.0 / 0.00	78 / 1.28	4.0 / 0.08	6.0 / 0.17	0.0 / 0.00	0.0 / 0.00	0.1	36	PO_4 0.05 Zn 0.02[d] Cu 0.01	111[f]	24	55	0	10		
6/15 0740	13	75	7.9	92	190	7.5	— / 1.42[c]		12 / 0.52		0.0 / 0.00	102 / 1.67		8.5 / 0.24			0.2			142[e]	27	71	0	1		
7/11 1030	4.2	73	8.8	101	211	7.7	— / 1.54[c]		18 / 0.78		0.0 / 0.00	114 / 1.87		16 / 0.45			0.2			158[e]	34	77	0	1		
8/2	Dry --	Not	Sampled																							
9/12 0930	1.1	73	7.5	86	221	7.9	20 / 1.00	7.5 / 0.62	16 / 0.70	1.3 / 0.03	0.0 / 0.00	120 / 1.97	0.0 / 0.00	14 / 0.39	0.1 / 0.00	0.1 / 0.01	0.2	36	Fe 0.01 Zn 0.02[d] Al 0.06 PO_4 0.10	154[f]	30	81	0	1		
10/10 1240	9.8	57	10.1	97	203	7.5	— / 1.48[c]		13 / 0.57		0.0 / 0.00	102 / 1.67		12 / 0.34			0.1			152[e]	28	74	0	1		
11/1 1135	4.5	57	10.0	96	223	7.5	— / 1.60[c]		16 / 0.70		0.0 / 0.00	111 / 1.82		9.5 / 0.27			0.2			167[e]	30	80	0	3		
12/5 1050	117	44	11.6	94	110	7.3	— / 0.88[c]		6.2 / 0.27		0.0 / 0.00	58 / 0.95		4.2 / 0.12			0.1			83[e]	23	44	0	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

BIG CREEK ABOVE PINE FLAT DAM (STA. 334)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1960																										USGS
7/18 1230	0.96	88			134	7.5	0.86[c]		12 / 0.52		0.0 / 0.00	53 / 0.87		16 / 0.45			0.1				38	43	0	2		
8/	Dry --	No Sample																								
9/	Dry --	No Sample																								
10/	Dry --	No Sample																								
11/1 1030	2	60			196	7.3	1.10[c]		16 / 0.70		0.0 / 0.00	42 / 0.69		22 / 0.62			0.2				39	55	21	1		
12/5 1330	18	44	10.2	83	99.5	6.8	0.70[c]		7.7 / 0.33		0.0 / 0.00	32 / 0.52		8.4 / 0.24			0.1				32	35	9	12		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

BUTTE CREEK NEAR CHICO (STA. 84)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/11 0945	192	42	12.3	97	113	7.3	0.94[c]		4.3 / 0.19		0.0 / 0.00	59 / 0.97		1.0 / 0.03			0.0			84[e]	17	47	0	4	Median 6.2	
2/1 0945	304	46	11.2	94	94.6	7.2	0.84[c]		2.9 / 0.13		0.0 / 0.00	50 / 0.82		2.5 / 0.07			0.0			70[e]	13	42	1	20	Maximum 210.	
3/9 0900	1,270	47	11.3	96	68.4	7.1	0.60[c]		1.8 / 0.08		0.0 / 0.00	36 / 0.59		1.5 / 0.04			0.0			51[e]	12	30	0	170	Minimum 0.06	
4/13 0945	428	48	11.1	96	75.6	7.3	0.64[c]		1.9 / 0.08		0.0 / 0.00	40 / 0.66		1.5 / 0.04			0.0			56[e]	11	32	0	15		
5/9 0825	375	54	10.2	95	75.8	7.3	7.6 / 0.38	3.9 / 0.32	2.1 / 0.09	0.6 / 0.02	0.0 / 0.00	44 / 0.72	3.0 / 0.06	1.2 / 0.03	0.0 / 0.00	0.1 / 0.01	0.0	22	Al 0.01 Cu 0.01[d] PO_4 0.00 Zn 0.02	62[f]	11	35	0	20		
6/15 0950	215	66	8.9	95	90.3	7.3	0.86[c]		2.4 / 0.10		0.0 / 0.00	52 / 0.85		0.0 / 0.00			0.0			67[e]	10	43	0	2		
7/11 0845	139	63	9.2	95	103	7.4	0.90[c]		6.1 / 0.27		0.0 / 0.00	65 / 1.07		3.0 / 0.08			0.0			76[e]	23	45	0	1		
8/2 0840	121	62	9.0	92	106	7.3	1.00[c]		4.0 / 0.17		0.0 / 0.00	70 / 1.15		0.0 / 0.00			0.1			79[e]	15	50	0	4		
9/12 0800	118	62	8.9	91	108	7.3	12 / 0.60	5.6 / 0.46	4.6 / 0.20	0.9 / 0.02	0.0 / 0.00	68 / 1.11	6.0 / 0.12	2.5 / 0.07	0.0 / 0.00	0.0 / 0.00	0.0	24	Fe 0.02 PO_4 0.00[d] Al 0.02	89[f]	16	53	0	1		
10/10 1015	96	54	11.3	104	117	7.7	1.04[c]		3.4 / 0.15		0.0 / 0.00	68 / 1.11		2.0 / 0.06			0.0			87[e]	13	52	0	1		
11/1 0910	132	50	10.9	96	112	7.3	1.00[c]		4.5 / 0.20		0.0 / 0.00	64 / 1.05		0.0 / 0.00			0.0			83[e]	17	50	0	3		
12/5 0900	312	41	12.3	96	89.8	7.2	0.80[c]		2.9 / 0.13		0.0 / 0.00	54 / 0.89		0.5 / 0.01			0.1			67[e]	14	40	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CACHE CREEK NEAR CAPAY (STA. 80)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/15 1010	57	43	12.4	100	1,140	7.9	7.10[c]		106/4.61		6/0.20	96/1.57		200/5.64			4.5		Tot. Alk. 108	633[e]	39	355	266	1	Maximum 23	
2/4 1350	660	49	11.1	97	481	7.9	3.34[c]		37/1.61		0.0/0.00	177/2.90		57/1.61			1.8			267[e]	33	167	22	65	Minimum <0.045	
3/9 1620	1110	56	10.1	96	274	7.9	2.04[c]		17/0.74		0.0/0.00	125/2.05		19/0.54			0.8			152[e]	27	102	0	750	Median 2.3	
4/13 1535	112	70	9.4	104	621	8.1	4.44[c]		49/2.13		8/0.27	244/4.00		62/1.75			2.1		Tot. Alk. 260	345[e]	32	222	9	15		
5/10 0740	339	67	8.6	93	420	7.9	27/1.35	25/2.07	27/1.17	3.0/0.08	0.0/0.00	210/3.44	18/0.37	28/0.79	0.4/0.01	0.3/0.02	1.5	14	Al 0.10 Cu 0.01[d] PO_4 0.05 Zn 0.02	247[f]	25	171	0	50		
6/14 0745	488	78	7.7	93	323	7.9	2.68[c]		17/0.74		0.0/0.00	181/2.97		13/0.37			1.3			179[e]	22	134	0	35		
7/14 1440	330	82	8.0	100	319	8.1	2.68[c]		18/0.78		0.0/0.00	182/2.98		18/0.51			1.2			177[e]	23	134	0	6		
8/3 381 1420	381	81	8.0	99	306	8.1	2.60[c]		15/0.65		6/0.20	167/2.74		9.0/0.25			1.4		Tot. Alk. 179	170[e]	20	130	0	25		
9/13 1445	134	78	8.2	99	371	8.1	30/1.50	19/1.56	24/1.04	2.6/0.07	0.0/0.00	202/3.31	5.0/0.10	24/0.68	0.0/0.00	0.1/0.01	1.5	10	Al 0.09 Zn 0.05[d] PO_4 0.05	216[f]	25	153	0	4		
10/13 1615	36	65	9.4	99	479	7.9	3.54[c]		30/1.30		8/0.27	204/3.34		40/1.13			1.5		Tot. Alk. 220	266[e]	27	177	0	1		
11/4 1435	6.0	62	10.4	106	678	7.7	4.56[c]		60/2.61		0.0/0.00	270/4.43		75/2.12			1.6			376[e]	36	228	7	4		
12/7 0845	148	44	11.7	95	631	8.1	4.22[c]		54/2.35		8/0.27	210/3.44		76/2.14			2.9			350[e]	36	211	26	30		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CACHE CREEK NEAR LOWER LAKE (STA. 42)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in ppm / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/13 1420	0.7	42	12.7	100	307	7.7	2.74[c]		13/0.57		0.0/0.00	177/2.90		9.0/0.25			1.0			170[e]	17	137	0	3	Maximum 500 Minimum <0.045 Median 2.3	
2/3 1415	1.2	47	10.8	92	271	7.5	2.50[c]		12/0.52		0.0/0.00	147/2.41		14/0.39			0.8			151[e]	17	125	4	30		
3/10 1040	3.6	50	10.6	93	224	7.5	1.82[c]		9.9/0.43		0.0/0.00	102/1.67		6.0/0.17			0.4			125[e]	19	91	7	13		
4/14 1050	84	60	9.2	90	258	7.3	2.12[c]		11/0.48		0.0/0.00	115/1.88		6.5/0.18			0.4			143[e]	18	106	12	35		
5/10 1125	303	68	8.7	95	270	7.7	22/1.10	18/1.48	9.6/0.42	2.5/0.06	0.0/0.00	159/2.61	10/0.21	5.6/0.16	1.1/0.02	0.1/0.01	0.9	12	Al 0.07 PO_4 0.10[d]	160[f]	14	124	0	25		
6/14 1200	452	82	7.2	92	261	8.1	2.26[c]		9.9/0.43		0.0/0.00	156/2.56		5.0/0.14			0.8			145[e]	16	113	0	15		
7/13 1130	410	78	7.6	92	263	8.1	2.34[c]		9.4/0.41		0.0/0.00	160/2.62		6.0/0.17			0.9			146[e]	15	117	0	8		
8/4 0910	401	80	7.4	91	272	7.7	2.52[c]		11/0.48		0.0/0.00	164/2.69		10/0.28			0.8			151[e]	16	126	0	5		
9/14 0935	149	73	7.9	90	282	7.7	23/1.15	16/1.35	12/0.52	2.1/0.05	2/0.07	166/2.72	9.8/0.20	5.8/0.16	0.6/0.01	0.2/0.01	0.9	2.0	Fe 0.02 Cu 0.01[d] Al 0.08 Zn 0.01 PO_4 0.10 Tot. Alk. 170	156[f]	17	125	0	15		
10/12 1050	30	60	9.5	95	294	7.7	2.58[c]		11/0.48		0.0/0.00	165/2.70		6.0/0.17			1.0			163[e]	16	129	0	22		
11/3 0930	2.5	57	8.4	81	299	7.5	2.70[c]		13/0.57		0.0/0.00	171/2.80		8.5/0.24			1.0			166[e]	17	135	0	2		
12/7 1110	1.9	45	10.1	84	210	7.5	1.81[c]		9.2/0.40		0.0/0.00	114/1.87		4.0/0.11			0.6			117[e]	18	90	0	340		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CACHE CREEK, NORTH FORK NEAR LOWER LAKE (STA. 79)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/13 1330	47	46	13.3	111	862	8.1	6.00[c]		69 / 3.00		5 / 0.17	262 / 4.29		132 / 3.72			6.6		Tot. Alk. 272	489[e]	33	300	77	1	Maximum 62 Minimum <0.045 Median 2.3	
2/3 1320	472	47	10.8	93	313	7.7	2.56[c]		20 / 0.87		0.0 / 0.00	139 / 2.28		28 / 0.79			1.7			178[e]	25	128	14	30		
3/10 0955	460	46	11.1	93	209	7.7	1.76[c]		9.1 / 0.40		0.0 / 0.00	113 / 1.85		7.0 / 0.20			0.6			118[e]	19	88	0	600		
4/14 0955	88	59	10.2	101	378	8.1	3.08[c]		20 / 0.87		0.0 / 0.00	200 / 3.28		21 / 0.59			1.8			214[e]	22	154	0	15		
5/10 0950	55	68	9.2	100	408	7.9	27 / 1.35	24 / 1.95	25 / 1.09	1.7 / 0.04	0.0 / 0.00	217 / 3.56	16 / 0.33	23 / 0.65	0.4 / 0.01	0.1 / 0.01	2.1	20	Al 0.06 Zn 0.01[d] PO_4 0.05	246[f]	25	165	0	10		
6/14 1000	26	79	8.7	106	441	8.1	3.38[c]		28 / 1.22		10 / 0.33	203 / 3.33		31 / 0.87			3.0		Tot. Alk. 223	250[e]	27	169	0	2		
7/13 0955	1.3	77	9.1	108	487	8.0	3.60[c]		35 / 1.52		11 / 0.37	205 / 3.36		48 / 1.35			3.4		Tot. Alk. 227	276[e]	30	180	0	1		
8/4 0835	3.4	74	7.6	88	515	7.7	3.72[c]		37 / 1.61		0.0 / 0.00	230 / 3.77		50 / 1.41			3.9			292[e]	30	186	0	1		
9/14 0825	1.0	66	8.3	88	558	7.7	35 / 1.75	29 / 2.37	39 / 1.70	2.3 / 0.06	0.0 / 0.00	241 / 3.95	0.0 / 0.00	66 / 1.86	0.0 / 0.00	0.1 / 0.01	6.2	22	Al 0.09 Zn 0.03[d] PO_4 0.05 Cu 0.01	319[f]	29	206	8	1		
10/12 0945	1.5	62	10.3	104	554	7.7	3.92[c]		40 / 1.74		9 / 0.30	195 / 3.20		66 / 1.86			4.4		Tot. Alk. 213	315[e]	31	196	21	1		
11/3 0820	1.4	54	9.6	89	588	7.7	3.96[c]		49 / 2.13		0.0 / 0.00	216 / 3.54		72 / 2.03			5.7			332[e]	35	198	21	2		
12/7 1000	76	43	11.5	92	542	7.9	3.96[c]		87 / 3.78		8 / 0.27	194 / 3.18		60 / 1.69			4.4		Tot. Alk. 210	306[e]	49	198	26	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CACHE SLOUGH BELOW LINDSEY SLOUGH (STA. 110a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million													Total dissolved solids[g] in ppm	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
			ppm	%Sat			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents			Total ppm	N.C. ppm			
1960																										
2/11 1420		51			117				8.0					12						96	30					USBR
4/11 1155		61			111				6.7					7.8						92	26					
7/13 0920		71			205				13					11						156	15					
10/13 1100		--			200				11					15						164	24					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CALAVERAS RIVER AT JENNY LIND (STA. 16a)

Date and time sampled P.S.T	Discharge in cfs	Temp. in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/4 1115	13	40	11.9	91	332	7.5	2.90[c]		12 / 0.52		0.0 / 0.00	134 / 2.20		15 / 0.42			0.1			204[e]	15	145	35	1	Maximum 620 Minimum 0.23 Median 1.3	
2/1 1430	57	52	9.1	82	238	7.6	2.12[c]		7.7 / 0.33		0.0 / 0.00	104 / 1.70		9.8 / 0.28			0.0			146[e]	14	106	21	30		
3/1 1115	1.9	52	9.0	81	225	7.3	2.00[c]		6.7 / 0.29		0.0 / 0.00	100 / 1.64		8.0 / 0.23			0.0			138[e]	13	100	18	15		
4/4 1015	3.7	67	6.3	68	307	7.3	2.56[c]		11 / 0.48		4 / 0.13	135 / 2.21		15 / 0.42			0.2		Tot. Alk. 143	189[e]	16	128	11	1		
5/2 1045	6.6	67	8.9	96	245	7.5	27 / 1.35	11 / 0.93	8.8 / 0.38	2.1 / 0.05	0.0 / 0.00	123 / 2.02	21 / 0.44	8.8 / 0.25	0.3 / 0.00	0.1 / 0.01	0.1	14	Fe 0.02 PO_4 0.05[d] Al 0.04 Cu 0.01	154[f]	14	114	13	0.2		
6/1 1025	3.0	77	9.6	114	236	7.9	2.10[c]		8.1 / 0.35		0.0 / 0.00	128 / 2.10		8.5 / 0.24			0.0			145[e]	14	105	0	1		
7/5 1105	22	80	8.5	104	250	7.9	2.28[c]		7.2 / 0.31		0.0 / 0.00	135 / 2.21		7.2 / 0.20			0.0			154[e]	12	114	3	3		
8/8	Dry -- Not Sampled																									
9/5	Dry -- Not Sampled																									
10/3	Dry -- Not Sampled																									
11/1	Dry -- Not Sampled																									
12/13 1040	15	47	10.9	92	286	7.3	2.50[c]		9.8 / 0.43		0.0 / 0.00	116 / 1.90		13 / 0.37			0.0			176[e]	15	125	30	18		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CALAVERAS RIVER NEAR STOCKTON (STA. 16b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1960																										USGS
1/14 0845	Ponded	40	10.5	81	135	7.2	13 / 0.65	4.7 / 0.39	5.0 / 0.22	5.8 / 0.15	0.0 / 0.00	60 / 0.98	8.0 / 0.17	7.0 / 0.20	1.4 / 0.02	0.2 / 0.01	0.2	19		94[f]	16	52	3		Maximum >7,000	
2/5 0715	45 (est.)	51	10.2	91	216	7.3	22 / 1.10	8.4 / 0.69	7.0 / 0.30	4.0 / 0.10	0.0 / 0.00	89 / 1.46	20 / 0.42	9.7 / 0.27	2.5 / 0.04	0.4 / 0.02	0.0	19		137[f]	14	89	16		Minimum 62	
3/10	Dry -- Not Sampled																								Median 1,300	
4/5	Dry -- Not Sampled																									
5/6	Dry -- Not Sampled																									
6/10	Dry -- Not Sampled																									
7/7	Dry -- Not Sampled																									
8/10 1330	3 (est.)	79	4.8	58	219	7.1	18 / 0.90	9.2 / 0.76	7.8 / 0.34	9.8 / 0.25	0.0 / 0.00	108 / 1.77	9.0 / 0.19	11 / 0.31	0.0 / 0.00	0.0 / 0.00	0.3	31		149[f]	15	83	0			
9/6 0630		69	4.0	44	176	7.2	13 / 0.65	6.7 / 0.55	8.6 / 0.37	9.0 / 0.23	0.0 / 0.00	79 / 1.29	6.0 / 0.12	11 / 0.31	1.6 / 0.03	0.1 / 0.01	0.2	23	PO_4 1.40[d]	118[f]	21	60	0	30		
10/3	Ponded -- Not Sampled																									
11/1	Dry -- Not Sampled																									
12/	Dry -- Not Sampled																									

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CARQUINEZ STRAIT AT MARTINEZ (STA. 28a)

Date and time sampled P.S.T. 1960	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							equivalents per million																			
1/13 1035		48			24142															15864						USBR
2/15 1225		52			301															184						
3/15 1005		53			490															284						
4/14 1345		--			3784															2560						
5/12 1345		65			10165															7232						
6/16 1045		--			16503															13812						
7/14 1440		69			15579															13504						
8/18 0920		68			30531															16396						
9/16 1140		66			19538															17300						
10/11 1235		63			20426				3910					7455						15136	83					
11/15 1120		58			23578				4715					9053						17234	87					
12/15 1030		46			26064				5060					9337						18934	84					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

SPO

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CHOWCHILLA RIVER AT BUCHANAN DAM SITE (STA. 114)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/5 1000	4.2	35	13.3	95	566	7.5	3.28[c]		52 / 2.26		0.0 / 0.00	114 / 1.87		130 / 3.67			0.1			348[e]	59	164	71	15		
2/2 1800	352	51	10.2	91	115	7.2	0.76[c]		7.4 / 0.32		0.0 / 0.00	40 / 0.66		12 / 0.34			0.0			71[e]	30	38	5	700		
3/2 1050	29	53	11.0	100	239	7.6	1.50[c]		19 / 0.83		0.0 / 0.00	84 / 1.38		32 / 0.90			0.0			147[e]	36	75	6	2		
4/5 0910	44	66	9.0	96	191	7.5	1.24[c]		16 / 0.70		0.0 / 0.00	81 / 1.33		21 / 0.59			0.0			117[e]	38	57	0	4.5		
5/4 1245	46	71	8.7	98	168	7.7	16 / 0.80	2.9 / 0.24	14 / 0.61	2.2 / 0.06	0.0 / 0.00	73 / 1.20	3.0 / 0.06	17 / 0.48	0.3 / 0.00	0.1 / 0.01	0.0	30	Fe 0.02 / Al 0.04 Cu 0.01 / PO_4 0.10[d]	122[f]	36	52	0	2		
6/1 1115	7.5	88	7.3	97	289	7.8	1.72[c]		26 / 1.13		0.0 / 0.00	94 / 1.54		45 / 1.27			0.1			178[e]	40	86	9	15		
7/6	Ponded -- Not Sampled																									
8/10	Ponded -- Not Sampled																									
9/6	Dry -- Not Sampled																								Median 18	
10/	Dry -- Not Sampled																									
11/	Dry -- Not Sampled																								Max. 230	
12/14 0925	8.1	44	11.9	97	420	7.5	52 / 2.60[c]		39 / 1.70		0.0 / 0.00	132 / 2.16		84 / 2.37			0.0			258[e]	40	130	22	1	Min. 2.3	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CLEAR CREEK NEAR IGO (STA. 12d)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/14 1315	74	36	13.4	97	204	7.5	1.28[c]		16 / 0.70		0.0 / 0.00	53 / 0.87		29 / 0.82			0.1			131[e]	35	64	21	3		
2/24 1610	244	44	11.8	97	79.6	7.3	0.56[c]		4.3 / 0.19		0.0 / 0.00	26 / 0.43		5.5 / 0.16			0.0			51[e]	25	28	7	35		
3/8 0910	1,970	46	12.0	102	57.8	6.9	0.48[c]		2.6 / 0.11		0.0 / 0.00	24 / 0.39		3.0 / 0.08			0.0			37[e]	19	24	4			
4/12 0900	281	51	11.0	98	87.2	7.3	0.68[c]		3.9 / 0.17		0.0 / 0.00	34 / 0.56		4.5 / 0.13			0.0			56[e]	20	34	6	15		
5/5 0935	309	53	10.7	98	88.8	7.3	8.7 / 0.43	2.3 / 0.19	4.5 / 0.20	0.9 / 0.02	0.0 / 0.00	40 / 0.66	6.6 / 0.14	2.1 / 0.06	0.0 / 0.00	0.0 / 0.00	0.0	18	Fe 0.08 Al 0.06[d] PO_4 0.15	63[f]	24	31	0	3		
6/14 0810	142	70	8.5	95	101	7.3	0.74[c]		5.4 / 0.23		0.0 / 0.00	44 / 0.72		6.5 / 0.18			0.0			64[e]	24	37	1	1		
7/4 1345	74	77	8.5	101	125	7.9	1.00[c]		7.2 / 0.31		0.0 / 0.00	54 / 0.89		9.5 / 0.27			0.0			80[e]	24	50	6	8		
8/8 1250	39	78	8.8	106	173	8.1	1.17[c]		13 / 0.57		0.0 / 0.00	75 / 1.23		14 / 0.39			0.0			111[e]	33	58	0	1		
9/5 1545	36	73	10.1	116	197	8.1	18 / 0.90	4.5 / 0.37	16 / 0.70	1.3 / 0.03	4 / 0.13	70 / 1.15	11 / 0.23	19 / 0.54	0.0 / 0.00	0.0 / 0.00	0.1	14	Fe 0.03 Al 0.02[d] PO_4 0.00 Tot. Alk. 78	122[f]	35	64	0	7		
10/10 1615	45	58	9.9	96	193	7.9	16 / 0.80	5.6 / 0.46	14 / 0.61		0.0 / 0.00	67 / 1.10		18 / 0.51			0.0			124[e]	33	63	8	1		
11/7 1540	49	55	10.8	101	180	7.7	1.18[c]		13 / 0.57		0.0 / 0.00	66 / 1.08		17 / 0.48			0.0			115[e]	33	59	5	13		
12/12 1440	150	44	12.2	99	119	7.4	1.02[c]		6.5 / 0.28		0.0 / 0.00	63 / 1.03		7.2 / 0.20			0.0			76[e]	22	51	0	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CLEAR LAKE AT LAKEPORT (STA. 41)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/13 1600		45	10.4	86	262	7.3	2.36[c]		10 / 0.44		0.0 / 0.00	148 / 2.43		8.0 / 0.23			0.8			147[e]	16	118	0	15	Maximum 1,300 Minimum 0.06 Median 2.3	
2/3 1545		47	10.3	89	243	7.4	2.24[c]		9.6 / 0.42		0.0 / 0.00	132 / 2.16		10 / 0.28			0.6			136[e]	16	112	4	110		
3/10 1220		54	9.7	90	222	7.3	1.96[c]		8.7 / 0.38		0.0 / 0.00	124 / 2.03		6.0 / 0.17			0.6			125[e]	16	98	0	110		
4/14 1220		58	8.5	83	232	7.5	2.08[c]		8.3 / 0.36		0.0 / 0.00	131 / 2.15		5.0 / 0.14			0.8		PO_4 0.00	130[e]	15	104	0	35		
5/10 1645		72	10.9	122	235	7.9	20 / 1.00	13 / 1.06	7.8 / 0.34	2.2 / 0.06	0.0 / 0.00	138 / 2.26	6.0 / 0.12	4.9 / 0.14	0.9 / 0.01	0.1 / 0.01	1.2	14	Al 0.13 Zn 0.02[d] PO_4 0.10	138[f]	14	103	0	60		
6/14 1350		82	9.1	114	243	8.1	2.18[c]		8.8 / 0.38		0.0 / 0.00	145 / 2.38		7.8 / 0.22			0.7			136[e]	15	109	0	5		
7/13 1250		79	6.8	83	252	7.7	2.26[c]		8.9 / 0.39		0.0 / 0.00	152 / 2.49		6.0 / 0.17			0.8			141[e]	15	113	0	13		
8/4 1015		79	6.5	79	263	7.5	2.36[c]		10 / 0.44		0.0 / 0.00	156 / 2.56		8.0 / 0.23			0.7			147[e]	16	118	0	10		
9/14 1055		76	9.0	106	276	8.3	22 / 1.10	15 / 1.26	11 / 0.48	1.7 / 0.04	0.0 / 0.00	158 / 2.59	6.0 / 0.12	6.8 / 0.19	4.6 / 0.07	0.1 / 0.01	0.8	9.9	Fe 0.01 Cu 0.01[d] Al 0.07 As 0.01 PO_4 0.60	156[f]	17	118	0	25		
10/12 1240		68	13.4	146	273	8.1	2.34[c]		9.7 / 0.42		0.0 / 0.00	147 / 2.41		6.5 / 0.18			0.8			153[e]	15	117	0	50		
11/3 1110		58	7.5	73	272	7.7	2.44[c]		12 / 0.52		0.0 / 0.00	152 / 2.49		7.5 / 0.21			0.6			153[e]	18	122	0	33		
12/7 1210		47	9.8	83	257	7.5	2.36[c]		10 / 0.44		0.0 / 0.00	144 / 2.36		5.5 / 0.16			0.8			144[e]	16	118	0	50		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

COLUSA TROUGH NEAR COLUSA (STA. 87)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH [a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by [i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/13 1100	296	43	11.5	92	904	7.7	9.2 / 4.52[c]		122 / 5.31		0.0 / 0.00	270 / 4.43		74 / 2.09			0.3			538[e]	55	216	0	60	Median 230.	
2/3 1155	1,220	50	8.5	75	455	7.4	4.7 / 2.35[c]		49 / 2.13		0.0 / 0.00	130 / 2.13		30 / 0.85			0.0			271[e]	47	118	11	700	Maximum 7,000.	
3/9 1420	151	60	11.3	113	1,240	7.9	12.8 / 6.28[c]		161 / 7.00		0.0 / 0.00	353 / 5.79		110 / 3.10			0.4			738[e]	53	313	24	35	Minimum 6.2	
4/13 1240	173	65	8.9	94	467	7.7	5.3 / 2.64[c]		47 / 2.04		0.0 / 0.00	146 / 2.39		30 / 0.85			0.1			278[e]	44	132	12	150		
5/4 0910	1,190	62	7.9	80	369	7.7	21 / 1.05	13 / 1.05	40 / 1.74	3.0 / 0.08	0.0 / 0.00	142 / 2.33	50 / 1.04	20 / 0.56	0.8 / 0.01	0.1 / 0.01	0.2	17	Fe 0.17 Cu 0.02 [d] PO4 0.20 Zn 0.03 Al 0.29	235[f]	44	105	0	80		
6/13 1620	577	86	6.3	89	440	7.7	5.0 / 2.50[c]		48 / 2.09		0.0 / 0.00	186 / 3.05		2.2 / 0.06			0.3			262[e]	46	125	0	25		
7/13 0825	784	74	7.0	81	382	7.4	4.4 / 2.44[c]		33 / 1.44		0.0 / 0.00	186 / 3.05		18 / 0.51			0.2			227[e]	37	122	0	20		
8/3 1220	760	74	7.3	85	386	7.3	4.8 / 2.48[c]		38 / 1.65		0.0 / 0.00	186 / 3.05		16 / 0.45			0.1			230[e]	40	124	0	40		
9/13 1155	888	72	7.0	79	418	7.5	26 / 1.30	16 / 1.28	38 / 1.65	2.6 / 0.07	0.0 / 0.00	188 / 3.08	19 / 0.40	26 / 0.73	0.9 / 0.01	0.3 / 0.02	0.1	26	Fe 0.02 Cu 0.01 [d] Al 0.14 Zn 0.01 PO4 0.35	248[f]	38	129	0	45		
10/12 0805	304	57	9.2	88	440	7.5	5.6 / 2.66[c]		37 / 1.61		0.0 / 0.00	176 / 2.88		24 / 0.68			0.1			262[e]	38	133	0	60		
11/2 1710	484	60	8.9	89	436	7.5	5.6 / 2.56[c]		48 / 2.09		0.0 / 0.00	185 / 3.03		16 / 0.45			0.1			260[e]	45	128	0	125		
12/6 1425	1,180	44	11.2	91	706	7.7	7.2 / 3.60[c]		89 / 3.87		0.0 / 0.00	214 / 3.51		46 / 1.30			0.3			420[e]	52	180	5	100		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CONTRA COSTA CANAL AT FIRST PUMP LIFT (STA. 109a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[g]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										
1/12 1315		45			859	8.7	45	29	83	3.9	20	86	120	119	2.5					560	43					USBR
2/12 1410		55			1136	8.0	56	34	128	4.7	0.0	134	181	168	9.9		1.10			710	49					
3/15 1350		57			730	8.1	37	20	75	3.5	0.0	106	101	109	3.7					456	47					
4/13 1325		66			256	7.3	19	8.4	26	2.0	0.0	68	38	27	1.2					196	40					
5/12 1440		71			239	7.3	17	6.5	17	1.6	0.0	62	16	25	1.2		0.60			140	34					
6/15 1515		--			242	6.9	15	11	19	1.6	0.0	74	24	23	0.0					148	33					
7/12 1405		78			466	7.6	21	11	50	2.0	0.0	72	31	83	0.0					260	52					
8/17 1410		76			895	7.1	24	18	112	5.1	0.0	75	63	198	1.2					572	64					
9/16 1340		72			833	7.1	24	19	101	5.5	0.0	84	59	171	0.6					524	60					
10/11 1115		60			527	7.9	23	14	54	4.3	0.0	96	40	80	1.2					352	49					
11/15 0900		54			515	8.0	19	16	48	2.3	0.0	99	43	69	1.2					308	47					
12/12 1325		50			720	7.4	31	22	72	2.3	0.0	119	79	107	1.2					456	48					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

COSUMNES RIVER AT McCONNELL (STA. 94a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/14 1030	93	42	11.9	94	89.8	7.3	9.6 / 0.48	2.9 / 0.24	4.4 / 0.19	1.0 / 0.03	0.0 / 0.00	39 / 0.64	7.0 / 0.15	4.5 / 0.13	0.0 / 0.00	0.3 / 0.02	0.1	18		67[f]	20	36	4		Maximum 2,400 Minimum 2.3 Median 13.	
2/5 0940	205	50	10.6	95	108	7.3	/ 0.88[c]		4.0 / 0.17		0.0 / 0.00	44 / 0.72		4.5 / 0.13			0.2			81[e]	16	44	8	70		
3/4 0930	152	50	10.8	95	93.0	7.3	/ 0.78[c]		3.1 / 0.13		0.0 / 0.00	41 / 0.67		3.2 / 0.09			0.0			70[e]	14	39	5	25		
4/6 1545	660	64	9.1	95	50.4	7.1	/ 0.44[c]		2.1 / 0.09		0.0 / 0.00	27 / 0.44		0.5 / 0.01			0.0			38[e]	17	22	0	8		
5/3 1045	395	60	9.7	97	64.3	7.3	7.2 / 0.36	6.7 / 0.14	2.4 / 0.10	0.8 / 0.02	0.0 / 0.00	32 / 0.52	3.0 / 0.06	2.0 / 0.06	0.0 / 0.00	0.0 / 0.00	0.0	19	Fe 0.10 Cu 0.01 [d] PO_4 0.10 Al 0.01	52[f]	16	25	0	40		
6/2 1045	56	70	7.7	86	68.7	7.1	/ 0.58[c]		2.6 / 0.11		0.0 / 0.00	36 / 0.59		2.0 / 0.06			0.0			52[e]	16	29	0	15		
7/8	Dry --	Not Sampled																								
8/10	Dry --	Not Sampled																								
9/9	Dry --	Not Sampled																								
10/	Dry --	Not Sampled																								
11/	Dry --	Not Sampled																								
12/16 0720	26	47	11.5	97	98.6	7.3	/ 0.78[c]		4.6 / 0.20		0.0 / 0.00	43 / 0.70		3.5 / 0.10			0.0			74[e]	20	39	4	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

COSUMNES RIVER AT MICHIGAN BAR (STA. 94)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/4 0815	25	35	12.6	90	98.0	7.1	0.73[c]		4.2 / 0.18		0.0 / 0.00	45 / 0.74		3.5 / 0.10			0.1			73[e]	20	37	0	10	Maximum 1,300 Minimum 0.06 Median 13.	
2/1 0830	89	50	10.2	90	118	7.3	1.00[c]		4.4 / 0.19		0.0 / 0.00	48 / 0.79		5.0 / 0.14			0.0			88[e]	16	50	11	30		
3/1 0700	173	47	11.3	96	90.3	7.1	0.80[c]		2.9 / 0.13		0.0 / 0.00	52 / 0.85		2.2 / 0.06			0.1			67[e]	14	40	0	5		
4/4 0820	722	59	10.0	98	59.0	7.1	0.48[c]		2.5 / 0.11		0.0 / 0.00	30 / 0.49		1.5 / 0.04			0.0			44[e]	19	24	0	4		
5/2 0605	390	59	9.7	95	60.7	7.3	6.4 / 0.32	2.2 / 0.18	2.4 / 0.10	0.9 / 0.02	0.0 / 0.00	33 / 0.54	2.0 / 0.04	2.0 / 0.06	0.0 / 0.00	0.0 / 0.00	0.1	19	Fe 0.09 Al 0.01[d] PO_4 0.10	51[f]	16	25	0	15		
6/1 0755	123	74	8.3	96	63.6	7.3	0.52[c]		2.7 / 0.12		0.0 / 0.00	34 / 0.56		2.5 / 0.07			0.0			47[e]	19	26	0	25		
7/5 0754	48	81	7.2	89	71.3	7.5	0.64[c]		2.8 / 0.12		0.0 / 0.00	42 / 0.69		3.0 / 0.08			0.0			53[e]	16	32	0	1		
8/8 0700	16	75	7.8	91	74.6	7.6	0.62[c]		3.1 / 0.13		0.0 / 0.00	44 / 0.72		0.5 / 0.01			0.0			55[e]	17	31	0	1		
9/5 1000	7.8	74	8.6	100	76.9	7.5	7.6 / 0.38	3.4 / 0.28	3.3 / 0.14	1.0 / 0.03	0.0 / 0.00	38 / 0.62	12 / 0.25	1.5 / 0.04	0.0 / 0.00	0.0 / 0.00	0.0	15	Al 0.07 Zn 0.01[d] PO_4 0.00	63[f]	17	33	2	4		
10/3 0750	4.2	65	9.9	104	105	7.3	0.80[c]		4.1 / 0.18		0.0 / 0.00	54 / 0.89		1.5 / 0.04			0.0			78[e]	18	40	0	10		
11/1 0815	14	55	9.6	90	98.8	7.3	0.80[c]		4.6 / 0.20		0.0 / 0.00	50 / 0.82		0.3 / 0.01			0.1			73[e]	20	40	0	1		
12/13 0815	51	43	12.1	97	91.3	7.3	0.68[c]		4.4 / 0.19		0.0 / 0.00	41 / 0.67		3.2 / 0.09			0.0			68[e]	22	34	0	2		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

COTTONWOOD CREEK NEAR COTTONWOOD (STA. 12b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 0920	124	44	10.7	87	270	7.2	2.20[c]		13 / 0.57		0.0 / 0.00	117 / 1.92		22 / 0.62			0.0			158[e]	21	110	14	2	Median 42.	
2/2 1045	15,000	45	11.0	91	176	7.4	1.64[c]		6.6 / 0.29		0.0 / 0.00	73 / 1.20		13 / 0.37			0.0			103[e]	15	82	22	150	Maximum 7,000.	
3/7 1340	5,460	54	9.5	88	140	7.3	1.20[c]		5.1 / 0.22		0.0 / 0.00	66 / 1.08		3.5 / 0.10			0.1			82[e]	15	60	6	600	Minimum 2.3	
4/11 1440	570	64	9.0	94	212	7.5	1.92[c]		6.4 / 0.28		0.0 / 0.00	110 / 1.80		8.0 / 0.23			0.0			124[e]	13	96	6	15		
5/10 1500	375	74	8.5	98	216	7.5	22 / 1.10	10 / 0.86	8.1 / 0.35	1.2 / 0.03	0.0 / 0.00	118 / 1.93	9.0 / 0.19	9.0 / 0.25	0.4 / 0.01	0.1 / 0.01	0.0	20	Cu 0.01 Al 0.32[d] PO_4 0.05	138[f]	15	98	1	15		
6/13 1245	238	83	7.7	98	203	7.5	1.88[c]		6.7 / 0.29		0.0 / 0.00	117 / 1.92		7.5 / 0.21			0.1			119[e]	13	94	0	1		
7/4 1100	125	80	9.6	118	196	7.9	1.76[c]		7.0 / 0.30		0.0 / 0.00	112 / 1.84		4.5 / 0.13			0.0			115[e]	15	88	0	10		
8/8 0910	56	78	7.8	88	192	7.1	1.60[c]		8.5 / 0.37		0.0 / 0.00	105 / 1.72		5.2 / 0.15			0.1			112[e]	19	80	0	2		
9/5 1100	63	74	10.3	119	175	7.3	16 / 0.80	7.9 / 0.65	9.5 / 0.41	1.3 / 0.03	0.0 / 0.00	102 / 1.67	7.0 / 0.15	3.9 / 0.11	0.0 / 0.00	0.0 / 0.00	0.1	25	Fe 0.05 Al 0.01[d] PO_4 0.05 Cu 0.05	121[f]	22	72	0	7		
10/10 1200	138	62	10.2	104	172	7.3	14 / 0.70	8.3 / 0.68	8.6 / 0.37		0.0 / 0.00	94 / 1.54		4.5 / 0.13			0.0			101[e]	21	69	0	1		
11/7 1120	107	61	11.1	112	180	7.5	1.50[c]		9.9 / 0.43		0.0 / 0.00	95 / 1.56		8.9 / 0.25			0.0			105[e]	22	75	0	1		
12/12 1040	257	45	10.9	90	269	7.3	2.20[c]		11 / 0.48		0.0 / 0.00	120 / 1.97		17 / 0.48			0.0			158[e]	15	110	12	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

COTTONWOOD CREEK BELOW NORTH FORK COTTONWOOD CREEK (STA. 11a)

Date and time sampled P.S.T.	Discharge in cfs (est. by sampler)	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/12 1030	13	40	12.8	98	271	7.5	2.26[c]		13 / 0.57		0.0 / 0.00	119 / 1.95		20 / 0.56			0.0			170[e]	20	113	15	6		
2/2 0955	320	44	11.5	93	154	7.3	1.28[c]		6.6 / 0.29		0.0 / 0.00	54 / 0.89		9.0 / 0.25			0.0			97[e]	18	64	20	170		
3/8 0950	600	47	11.1	94	105	7.3	0.92[c]		4.5 / 0.20		0.0 / 0.00	48 / 0.79		3.5 / 0.10			0.0			66[e]	18	46	7	450		
4/12 0940	85	51	10.6	94	110	7.3	0.96[c]		3.9 / 0.17		0.0 / 0.00	56 / 0.92		4.0 / 0.11			0.0			70[e]	15	48	2	15		
5/5 1200	72	61	9.7	98	211	7.7	21 / 1.05	11 / 0.90	6.8 / 0.30	1.2 / 0.03	0.0 / 0.00	116 / 1.90	11 / 0.23	4.5 / 0.13	0.0 / 0.00	0.0 / 0.00	0.0	19	Fe 0.05 Al 0.04[d] PO_4 0.10 Pb 0.01	132[f]	13	98	3	1		
6/14 0910	100	76	7.8	92	207	7.5	1.96[c]		4.9 / 0.21		0.0 / 0.00	123 / 2.02		6.0 / 0.17			0.0			130[e]	10	98	0	1		
7/4 1240	75	85	7.7	100	212	7.9	2.12[c]		6.0 / 0.26		0.0 / 0.00	126 / 2.07		7.0 / 0.20			0.0			133[e]	11	106	3	4		
8/8 1345	32	87	9.2	123	244	8.1	2.11[c]		9.1 / 0.40		4 / 0.13	119 / 1.95		10 / 0.28			0.0		Tot. Alk. 127	153[e]	16	106	2	1		
9/5 1630	25	84	10.3	132	281	7.9	27 / 1.35	14 / 1.15	12 / 0.52	1.1 / 0.03	9 / 0.30	132 / 2.16	9.0 / 0.19	16 / 0.45	0.0 / 0.00	0.0 / 0.00	0.1	18	Tot. Alk. 150 PO_4 0.05 Al 0.16[d]	171[f]	17	125	2	6		
10/10 1700	20	65	9.2	97	296	7.9	26 / 1.30	14 / 1.18	12 / 0.52		0.0 / 0.00	144 / 2.36		20 / 0.56			0.0			186[e]	17	124	6	1		
11/7 1630	40	63	10.1	104	347	7.9	3.03[c]		13 / 0.57		4 / 0.13	162 / 2.66		24 / 0.68			0.0		Tot. Alk. 170	218[e]	16	152	13	1		
12/12 1510	100	45	11.9	98	239	7.7	[c] / 2.12		9.0 / 0.39		0.0 / 0.00	124 / 2.03		12 / 0.34			0.1			150[e]	16	106	4	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

COTTONWOOD CREEK, SOUTH FORK ABOVE COTTONWOOD CREEK (STA. 11b)

Date and time sampled P.S.T.	Discharge in cfs (est. by sampler)	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 1120	15	42	12.6	100	520	7.5	4.08[c]		28 / 1.22		0.0 / 0.00	139 / 2.28		81 / 2.28			0.2			354[e]	23	204	90	1		
2/2 1115	240	44	11.5	94	218	7.5	1.84[c]		10 / 0.44		0.0 / 0.00	84 / 1.38		19 / 0.54			0.0			149[e]	19	92	23	170		
3/8 1040	550	47	11.0	94	164	7.5	1.44[c]		6.0 / 0.26		0.0 / 0.00	80 / 1.31		6.2 / 0.17			0.0			112[e]	15	72	6	700		
4/12 1020	100	58	10.1	98	241	7.7	2.00[c]		9.4 / 0.41		0.0 / 0.00	116 / 1.90		12 / 0.34			0.0			164[e]	17	100	5	10		
5/5 1330	47	71	8.8	99	310	7.8	32 / 1.60	12 / 0.95	14 / 0.61	1.4 / 0.04	0.0 / 0.00	140 / 2.29	32 / 0.67	13 / 0.37	0.0 / 0.00	0.0 / 0.00	0.1	12	Fe 0.03, Al 0.04, PO_4 0.00[d]	186[f]	19	127	12	1		
6/14 1035	50	82	7.8	98	225	7.9	1.88[c]		9.8 / 0.43		0.0 / 0.00	113 / 1.85		12 / 0.34			0.1			153[e]	19	94	1	1		
7/4 1000	2	85	8.0	104	261	7.9	2.20[c]		11 / 0.48		0.0 / 0.00	128 / 2.10		16 / 0.45			0.0			178[e]	18	110	5	12		
8/8 0830	0.1	78	7.1	86	311	7.3	2.57[c]		14 / 0.61		0.0 / 0.00	159 / 2.61		16 / 0.45			0.1			212[e]	19	128	0	1		
9/5 1015	Not Sampled -- No Flow																									
10/10 1115	0.5	62	5.3	54	311	7.1	33 / 1.65	12 / 0.97	12 / 0.52		0.0 / 0.00	161 / 2.64		12 / 0.34			0.0			212[e]	17	131	0	2		
11/7 1040	Not Sampled -- No Flow																									
12/12 1005	30	44	12.3	100	421	7.7	3.72[c]		20 / 0.87		0.0 / 0.00	191 / 3.13		47 / 1.33			0.1			287[e]	19	186	29	2		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

COW CREEK NEAR MILLVILLE (STA. 88a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/14 1110	353	38	12.4	92	163	7.3	1.20[c]		9.4 / 0.41		0.0 / 0.00	62 / 1.02		14 / 0.39			0.0			118[e]	25	60	9	5		
2/24 1500	286	48	11.1	96	142	7.5	1.34[c]		7.0 / 0.30		0.0 / 0.00	63 / 1.03		8.0 / 0.23			0.1			103[e]	18	67	15	35		
3/7 1502	7,260	55	9.9	93	65.7	7.1	0.52[c]		2.6 / 0.11		0.0 / 0.00	31 / 0.51		1.4 / 0.04			0.1			48[e]	17	26	1	425		
4/11 1600	322	62	9.6	98	110	7.3	0.88[c]		4.7 / 0.20		0.0 / 0.00	56 / 0.92		4.8 / 0.14			0.1			80[e]	19	44	0	25		
5/11 0910	315	66	8.8	94	102	7.3	11 / 0.55	4.0 / 0.33	4.4 / 0.19	0.9 / 0.02	0.0 / 0.00	54 / 0.89	5.0 / 0.10	3.5 / 0.10	0.3 / 0.00	0.0 / 0.00	0.1	26	Al 0.17 Fe 0.01[d] PO_4 0.05	82[f]	17	44	0	20		
6/13 1410	72	88	7.9	105	144	7.7	1.32[c]		6.6 / 0.29		0.0 / 0.00	78 / 1.28		5.0 / 0.14			0.3			104[e]	18	66	2	5		
7/12 1310	13	85	9.9	128	181	7.9	1.48[c]		9.0 / 0.39		0.0 / 0.00	104 / 1.70		5.8 / 0.16			0.1			131[e]	21	74	0	2		
8/8 1030	1.4	80	10.2	126	191	7.5	1.58[c]		10 / 0.44		0.0 / 0.00	113 / 1.85		5.5 / 0.16			0.0			138[e]	22	79	0	2		
9/5 1325	16	78	9.4	113	215	7.7	20 / 1.00	8.3 / 0.68	13 / 0.57	2.2 / 0.06	0.0 / 0.00	120 / 1.97	7.0 / 0.15	9.0 / 0.25	0.5 / 0.00	0.1 / 0.01	0.0	35	Al 0.09 Zn 0.01[d] PO_4 0.00	154[f]	25	84	0	5		
10/10 1340	243	68	6.5	71	189	7.7	1.52[c]		8.9 / 0.39		0.0 / 0.00	98 / 1.61		9.5 / 0.27			0.1			137[e]	20	76	0	4		
11/7 1340	68	60	10.7	107	170	7.3	1.36[c]		9.3 / 0.40		0.0 / 0.00	89 / 1.46		5.0 / 0.14			0.2			123[e]	23	68	0	4		
12/12 1230	230	44	12.0	98	167	7.3	1.30[c]		9.2 / 0.40		0.0 / 0.00	71 / 1.16		8.5 / 0.24			0.1			121[e]	24	65	7	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

DELTA CROSS CHANNEL NEAR WALNUT GROVE (STA. 98)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Tidal																									USGS
1/11 0945		45	10.2	84	185	7.3	1.42[c]		12 / 0.52		0.0 / 0.00	90 / 1.48		8.5 / 0.24			0.0			122[e]	27	71	0	3	Maximum 2,400 Minimum 2.3 Median 230	
2/2 0905		51	9.9	88	177	7.3	1.20[c]		12 / 0.52		0.0 / 0.00	68 / 1.11		10 / 0.28			0.0			117[e]	30	60	4	60		
3/1 0850		50	10.3	91	172	7.3	1.32[c]		9.9 / 0.43		0.0 / 0.00	79 / 1.29		9.5 / 0.27			0.1			114[e]	25	66	1	20		
4/11 1045		58	9.3	90	105	7.2	0.86[c]		4.3 / 0.19		0.0 / 0.00	52 / 0.85		3.8 / 0.11			0.1			69[e]	18	43	0	15		
5/2 0800		60	8.8	88	153	7.3	11 / 0.55	6.2 / 0.51	10 / 0.44	1.4 / 0.04	0.0 / 0.00	68 / 1.11	13 / 0.27	7.2 / 0.20	0.2 / 0.00	0.0 / 0.00	0.1	21	Fe 0.13 Cu 0.01 PO_4 0.20 Al 0.13 [d]	103[f]	29	53	0	60		
6/6 0740		70	7.6	84	141	7.3	1.08[c]		8.2 / 0.36		0.0 / 0.00	64 / 1.05		8.5 / 0.24			0.1			93[e]	25	54	2	25		
7/11 0850		69	8.2	90	166	7.5	1.16[c]		12 / 0.52		0.0 / 0.00	82 / 1.34		10 / 0.28			0.1			110[e]	31	58	0	15		
8/1 1010		70	7.5	83	169	7.3	1.18[c]		12 / 0.52		0.0 / 0.00	82 / 1.34		8.8 / 0.25			0.1			112[e]	31	59	0	10		
9/5 0830		69	6.5	71	233	7.3	17 / 0.85	8.9 / 0.73	19 / 0.83	1.4 / 0.04	0.0 / 0.00	113 / 1.85	9.0 / 0.19	15 / 0.42	0.5 / 0.01	0.0 / 0.00	0.1	22	Fe 0.04 Al 0.03 PO_4 0.30 Zn 0.03 [d]	149[f]	34	79	0	5		
10/3 0900		68	6.2	68	187	7.3	1.32[c]		12 / 0.52		0.0 / 0.00	84 / 1.38		8.0 / 0.23			0.1			124[e]	28	66	0	18		
11/7 0930		58	8.0	78	167	7.3	1.24[c]		11 / 0.48		0.0 / 0.00	80 / 1.31		3.0 / 0.08			0.0			110[e]	28	62	0	8		
12/12 0845		46	10.1	84	188	7.3	1.34[c]		12 / 0.52		0.0 / 0.00	80 / 1.31		10 / 0.28			0.0			124[e]	28	67	1	40		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

DELTA-MENDOTA CANAL NEAR MENDOTA (STA. 92)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/6 1345		45	15.4	128	1,010	8.1	4.38[c]		125 / 5.44		0.0 / 0.00	148 / 2.43		168 / 4.74			0.7			572[e]	55	219	98	15		
2/4 1630		52	11.3	102	926	8.0	4.16[c]		104 / 4.52		0.0 / 0.00	144 / 2.36		160 / 4.51			0.4			525[e]	52	208	90	35		
3/4 0725		53	9.3	85	932	7.7	4.02[c]		111 / 4.83		0.0 / 0.00	154 / 2.52		68 / 1.92			0.7			528[e]	55	201	75	80		
4/14 0705		62	8.4	86	431	7.5	2.38[c]		43 / 1.87		0.0 / 0.00	84 / 1.38		68 / 1.92			0.3			244[e]	44	119	50	35		
5/5 0735		62	8.3	84	314	7.3	19 / 0.95	9.4 / 0.77	31 / 1.35	2.6 / 0.07	0.0 / 0.00	72 / 1.18	43 / 0.90	38 / 1.07	1.4 / 0.02	0.1 / 0.01	0.3	16	Fe 0.2 Al 0.36[d] PO_4 0.20	196[f]	43	86	27	100		
6/9 0700		71	7.4	83	298	7.3	1.64[c]		26 / 1.13		0.0 / 0.00	80 / 1.31		36 / 1.02			0.2			169[e]	41	82	16	85		
7/14 0640		74	7.3	85	350	7.5	1.78[c]		44 / 1.91		0.0 / 0.00	88 / 1.44		54 / 1.52			0.2			198[e]	52	89	17	60		
8/4 0715		75	7.3	85	455	7.5	1.90[c]		53 / 2.31		0.0 / 0.00	86 / 1.41		80 / 2.26			0.1			258[e]	55	95	24	50		
9/8 1030		74	7.9	91	659	7.7	22 / 1.10	18 / 1.44	82 / 3.57	4.1 / 0.10	0.0 / 0.00	86 / 1.41	52 / 1.08	137 / 3.86	0.8 / 0.01	0.1 / 0.01	0.2	17	Al 0.18 PO_4 0.25[d]	375[f]	57	127	56	80		
10/6 0900		70	7.9	88	539	7.3	2.36[c]		55 / 2.39		0.0 / 0.00	101 / 1.66		94 / 2.65			0.1			305[e]	50	118	35	45	Median 6.2	
11/10 0915		58	9.3	90	816	7.9	3.48[c]		99 / 4.31		0.0 / 0.00	132 / 2.16		135 / 3.81			0.4			462[e]	55	174	66	60	Max. 2400	
12/14 1530		50	10.8	95	842	8.1	3.78[c]		101 / 4.39		0.0 / 0.00	137 / 2.25		140 / 3.95			0.0			476[e]	54	189	77	13	Min. 0.13	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

DELTA-MENDOTA CANAL NEAR TRACY (STA. 93)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 0745	104	45	9.7	80	869	7.5	— / 3.86[c]		104 / 4.52		0.0 / 0.00	141 / 2.31		154 / 4.34			0.4			489[e]	54	193	77	8	Maximum 7,000 Minimum 0.23 Median 62	
2/2 1655	285	55	10.3	97	1,030	7.6	— / 4.36[c]		125 / 5.44		0.0 / 0.00	164 / 2.69		188 / 5.30			0.6			580[e]	56	218	84	35		
3/2 0845	1,720	53	10.2	93	1,010	7.7	— / 4.25[c]		120 / 5.22		0.0 / 0.00	172 / 2.82		172 / 4.85			0.6			569[e]	55	212	71	100		
4/11 1645	2,520	64	9.4	98	496	7.7	— / 2.60[c]		49 / 2.13		0.0 / 0.00	94 / 1.54		80 / 2.26			0.2			279[e]	45	130	53	20		
5/2 1355	1,730	64	9.4	98	276	7.3	18 / 0.90	8.3 / 0.68	25 / 1.09	1.8 / 0.05	0.0 / 0.00	69 / 1.13	31 / 0.65	32 / 0.90	1.6 / 0.03	0.2 / 0.01	0.2	16	Fe 0.13 Al 0.24[d] PO_4 0.20	168[f]	40	79	22	85		
6/6 1580	3,380	75	7.3	85	240	7.3	— / 1.44[c]		19 / 0.83		0.0 / 0.00	78 / 1.28		27 / 0.76			0.2			135[e]	37	72	8	125		
7/11 1345	3,370	76	7.3	86	318	7.3	— / 1.58[c]		39 / 1.70		0.0 / 0.00	82 / 1.34		56 / 1.58			0.1			179[e]	52	79	12	30		
8/2 0600	3,370	75	6.5	76	465	7.3	— / 1.90[c]		56 / 2.44		0.0 / 0.00	86 / 1.41		85 / 2.40			0.1			262[e]	56	95	24	25		
9/5 1430	1,650	73	7.1	81	666	7.3	21 / 1.05	20 / 1.65	86 / 3.74	3.6 / 0.09	0.0 / 0.00	92 / 1.51	38 / 0.79	150 / 4.23	0.5 / 0.01	0.1 / 0.01	0.2	17	Fe 0.15 PO_4 0.25[d] Al 0.10 Zn 0.02	382[f]	57	135	60	30		
10/4 0920	2,546	70	7.1	79	509	7.3	— / 2.28[c]		51 / 2.22		0.0 / 0.00	102 / 1.67		90 / 2.54			0.1			287[e]	49	114	30	40		
11/7 1505	0	62	12.7	130	905	8.1	— / 3.90[c]		109 / 4.74		0.0 / 0.00	147 / 2.41		155 / 4.37			0.6			510[e]	55	195	74	70		
12/13 0700	0	48	8.9	77	1,010	7.3	— / 4.24[c]		129 / 5.61		0.0 / 0.00	172 / 2.82		165 / 4.65			0.3			569[e]	57	212	71	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

DELTA-MENDOTA CANAL NEAR TRACY (STA. 93)

Date and time sampled P.S.T.	Discharge in cfs Average Daily Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										
7/1-10	3,830				286	7.2	17 / 0.85	7.9 / 0.65	25 / 1.09	2.1 / 0.05	0 / 0.00	78 / 1.28	22 / 0.46	30 / 0.85	0.00 / 0.00	0.2 / 0.01	0.1	20	Fe 0.00	162[f] / 168[g]	41	75	11			USGS
7/11-21	3,970				357	7.2	18 / 0.90	10 / 0.82	33 / 1.44	2.3 / 0.06	0 / 0.00	77 / 1.26	25 / 0.52	52 / 1.47	0.1 / 0.00	0.4 / 0.02	0.1	19	Fe 0.00	198[f] / 201[g]	45	86	23			
7/22-31	3,970				407	7.3	17 / 0.85	11 / 0.89	41 / 1.78	3.2 / 0.08	0 / 0.00	79 / 1.29	24 / 0.50	68 / 1.92	1.0 / 0.02	0.1 / 0.01	0.1	19	Fe 0.00	223[f] / 217[g]	49	87	22			
8/1-10	3,630				505	7.0	18 / 0.90	13 / 1.04	60 / 2.61	2.7 / 0.07	0 / 0.00	80 / 1.31	29 / 0.60	94 / 2.65	0.00 / 0.00	0.1 / 0.01	0.2	19	Fe 0.00	275[f] / 303[g]	56	97	31			
8/11-17	3,700				557	6.4	19 / 0.95	13 / 1.11	67 / 2.91	3.4 / 0.09	0 / 0.00	82 / 1.34	31 / 0.65	108 / 3.05	0.0 / 0.00	0.2 / 0.01	0.4	19	Fe 0.00	301[f] / 324[g]	58	103	36			
8/18-31	3,070				635	6.3	20 / 1.00	15 / 1.20	79 / 3.44	3.2 / 0.08	0 / 0.00	84 / 1.38	34 / 0.71	129 / 3.64	0.0 / 0.00	0.3 / 0.02	0.2	19	Fe 0.00	341[f] / 357[g]	60	110	41			
9/1-9	1,980				661	7.3	20 / 1.00	15 / 1.26	81 / 3.52	3.3 / 0.08	0 / 0.00	87 / 1.43	40 / 0.83	132 / 3.72	0.5 / 0.01	0.1 / 0.01	0.2	19	Fe 0.00	354[f] / 367[g]	60	113	42			
9/10-22	1,730				676	7.8	24 / 1.20	15 / 1.26	81 / 3.52	3.5 / 0.09	0 / 0.00	96 / 1.57	42 / 0.87	132 / 3.72	0.6 / 0.01	0.1 / 0.01	0.2	20	Fe 0.00	365[f] / 387[g]	58	123	44			
9/23-25	1,980				803	7.5	34 / 1.70	20 / 1.62	95 / 4.13	3.8 / 0.10	0 / 0.00	123 / 2.02	47 / 0.98	152 / 4.29	1.1 / 0.02	0.2 / 0.01	0.3	19	Fe 0.00	433[f] / 440[g]	55	166	65			
9/26-30	2,000				606	7.4	24 / 1.20	15 / 1.22	70 / 3.04	3.0 / 0.08	0 / 0.00	106 / 1.74	38 / 0.79	110 / 3.10	0.5 / 0.01	0.2 / 0.01	0.2	21	Fe 0.00	334[f] / 336[g]	55	121	34			
10/1-12	2,060				668	8.4	28 / 1.40	18 / 1.44	74 / 3.22	2.8 / 0.07	3 / 0.10	117 / 1.92	37 / 0.77	119 / 3.36	1.2 / 0.02	0.1 / 0.01	0.1	21	Fe 0.02	362[f] / 381[g]	53	142	41			
10/13-21	1,230				994	7.5	47 / 2.35	24 / 1.97	115 / 5.00	4.2 / 0.11	0 / 0.00	165 / 2.70	72 / 1.50	183 / 5.16	1.5 / 0.02	0.1 / 0.01	0.2	24	Fe 0.02	552[f] / 583[g]	53	216	81			
10/22-31	902				761	8.3	36 / 1.80	19 / 1.60	86 / 3.74	2.8 / 0.07	2 / 0.07	135 / 2.21	58 / 1.21	130 / 3.67	1.6 / 0.03	0.1 / 0.01	0.1	21	Fe 0.02	423[f] / 440[g]	52	170	56			
11/1-10	482				907	8.3	45 / 2.25	22 / 1.81	94 / 4.09		4 / 0.13	146 / 2.39								539[g]	50	203	77			
11/11-20	428				859	7.6	42 / 2.10	21 / 1.73	94 / 4.09		0 / 0.00	144 / 2.36								491[g]	52	192	74			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

DELTA-MENDOTA CANAL NEAR TRACY (STA. 93 continued)

Date and time sampled P.S.T.	Discharge in cfs Average / Daily Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										
11/21-30	605				872	8.1	43 / 2.15	21 / 1.75	94 / 4.09		0 / 0.00	150 / 2.46								503[g]	51	195	72			USGS

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

DUTCH SLOUGH AT FARRAR PARK BRIDGE (STA. 108b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million													Total dissolved solids in ppm[g]	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
			ppm	%Sat			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents			Total ppm	N.C. ppm			
1960																										
3/17 1440		57			423															260						USBR
4/13 1240		64			183															160						
5/10 1335		--			185															108						
6/15 1330		--			266															196						
7/14 1245		73			766															444						
8/15 1230		71			2101															1136						
9/12 1035		76			1337															780						
10/10 1325		--			558															312						

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

32505-D-II 6-61 200 SPO

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

ELDER CREEK AT GERBER (STA. 95a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12	Dry																									
2/1 1320	276	51	9.8	88	301	7.8	27 / 1.35	13 / 1.05	13 / 0.57	1.2 / 0.03	0.0 / 0.00	134 / 2.20	12 / 0.25	19 / 0.54	1.1 / 0.02	0.2 / 0.01	0.0	17		170[f]	19	120	10			
3/7 1015	263	54	10.3	96	221	7.7	21 / 1.05	11 / 0.93	7.5 / 0.33	0.8 / 0.02	0.0 / 0.00	114 / 1.87	13 / 0.27	9.0 / 0.25	0.1 / 0.00	0.2 / 0.01	0.0	21		140[f]	14	99	6			
4/11 1045	42	60	9.5	95	269	7.9	22 / 1.10	16 / 1.34	9.6 / 0.42	1.6 / 0.04	0.0 / 0.00	139 / 2.28	13 / 0.27	14 / 0.39	0.9 / 0.01	0.2 / 0.01	0.0	15		160[f]	14	122	8			
5/10 0755	20	65	8.8	93	330	7.7	28 / 1.40	20 / 1.64	14 / 0.61	1.1 / 0.03	0.0 / 0.00	178 / 2.92	11 / 0.23	18 / 0.51	0.4 / 0.01	0.1 / 0.01	0.0	18	Al 0.16 Fe 0.01[d] PO_4 0.10	199[f]	17	152	6	25		
6/13 0905	0.2	77	8.0	95	418	7.9	35 / 1.75	24 / 2.00	16 / 0.70	1.3 / 0.03	6 / 0.20	209 / 3.43	15 / 0.31	24 / 0.68	0.0 / 0.00	0.1 / 0.01	0.0	20	Tot. Alk. 221	244[f]	16	188	7			
7/11	Dry --	Not Sampled																								
8/3	Dry --	Not Sampled																								
9/13	Dry --	Not Sampled																								
10/11	Dry --	Not Sampled																								
11/2	Dry --	Not Sampled																								
12/6 1115	25	40	11.9	92	472	7.7	35 / 1.75	25 / 2.04	24 / 1.04	0.9 / 0.02	5 / 0.17	171 / 2.80	23 / 0.48	48 / 1.35	2.2 / 0.04	0.0 / 0.00	0.0	17	Tot. Alk. 181	264[f]	21	189	41			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

ELDER CREEK NEAR PASKENTA (STA. 13e)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 1400	12	43	13.0	106	657	8.1	4.76[c]		50 / 2.18		4 / 0.13	206 / 3.38		92 / 2.59			0.1		Tot. Alk. 214	349[e]	31	238	63	1		
2/2 1340	202	48	10.7	92	264	7.7	2.48[c]		9.6 / 0.42		0.0 / 0.00	101 / 1.66		18 / 0.51			0.0			140[e]	14	124	41	40		
3/8 1226	426	49	10.7	93	170	7.7	1.64[c]		4.3 / 0.19		0.0 / 0.00	90 / 1.48		4.5 / 0.13			0.1			90[e]	10	82	8	600		
4/12 1230	60	59	9.8	96	260	7.9	2.30[c]		8.8 / 0.38		0.0 / 0.00	135 / 2.21		17 / 0.48			0.0			138[e]	14	115	4	5		
5/9 1530	52	78	7.9	95	300	8.1	26 / 1.30	18 / 1.46	13 / 0.57	1.0 / 0.03	4 / 0.13	150 / 2.46	19 / 0.40	9.0 / 0.25	0.0 / 0.00	0.2 / 0.01	0.0	14	Fe 0.01 Al 0.22 PO_4 0.05[d] Tot. Alk. 158	174[f]	17	138	8	40		
6/14 1220	16	85	8.1	105	395	8.1	3.12[c]		23 / 1.00		11 / 0.37	158 / 2.59		42 / 1.18			0.1		Tot. Alk. 180	210[e]	24	156	8	1		
7/11 1540	4.7	89	8.0	108	544	8.1	3.28[c]		44 / 1.91		10 / 0.33	122 / 2.00		101 / 2.85			0.1		Tot. Alk. 142	289[e]	37	164	48	1		
8/2 1335	2.0	87	8.9	119	902	8.1	4.38[c]		91 / 3.96		7 / 0.23	128 / 2.10		206 / 5.81			0.1		Tot. Alk. 142	479[e]	47	219	103	5		
9/12 1255	0.8	81	9.5	118	1,330	8.1	52 / 2.59	42 / 3.45	182 / 7.92	1.0 / 0.03	8 / 0.27	138 / 2.26	13 / 0.27	386 / 10.89	0.8 / 0.01	0.1 / 0.01	0.0	14	PO_4 0.00 Fe 0.01[d] Cu[4] 0.01 Al 0.10 Zn 0.01 Tot. Alk. 154	718[f]	57	302	176	1		
10/11 0805	2.1	52	10.4	94	1,250	7.7	6.16[c]		130 / 5.66		6 / 0.20	178 / 2.92		293 / 8.26			0.2		Tot. Alk. 190	665[e]	48	308	152	1		
11/1 1705	2.7	63	9.4	97	1,070	7.9	5.48[c]		117 / 5.09		0.0 / 0.00	199 / 3.26		229 / 6.46			0.1			569[e]	48	274	111	1		
12/5 1435	29	46	11.3	94	462	8.1	3.77[c]		23 / 1.00		6 / 0.20	177 / 2.90		45 / 1.27			0.1		Tot. Alk. 189	246[e]	21	188	33	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FALSE RIVER AT WEBB PUMP (STA. 112a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in ppm / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[g]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										
3/17 1440		57			250															156						USBR
4/14 1035		61			119															108						
5/12 1105		--			162															96						
6/16 1140		74			235															128						
7/14 1145		71			556															328						
8/15 1335		72			1184															624						
9/12 1145		72			781															484						
10/10 1130		--			390															264						

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

32505-D-H 6-61 200 SPO

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FEATHER RIVER AT NICOLAUS (STA. 20)

Date and time sampled PST	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/7 0745	1,890	39	12.5	95	139	7.1	1.22[c]		5.8 / 0.25		0.0 / 0.00	78 / 1.28		2.8 / 0.08			0.0			91[e]	17	61	0	6	Maximum 2,400 Minimum 1.3 Median 50	
2/16 0731	11,500	47	10.4	88	98.2	7.1	0.78[c]		2.6 / 0.11		0.0 / 0.00	39 / 0.64		4.4 / 0.12			0.0			65[e]	12	39	7	120		
3/4 1140	4,060	48	11.0	94	110	7.2	1.00[c]		4.3 / 0.19		0.0 / 0.00	56 / 0.92		4.0 / 0.11			0.0			72[e]	16	50	4	50		
4/5 1245	12,700	61	10.2	102	75.1	7.2	0.68[c]		2.1 / 0.09		0.0 / 0.00	42 / 0.69		2.1 / 0.06			0.0			49[e]	12	34	0	5		
5/9 1145	7,030	63	9.6	99	79.8	7.3	8.0 / 0.40	3.9 / 0.32	2.1 / 0.09	0.5 / 0.01	0.0 / 0.00	42 / 0.69	3.0 / 0.06	2.5 / 0.07	0.4 / 0.01	0.0 / 0.00	0.0	13	Fe 0.01 Al 0.16[d] PO_4 0.05	54[f]	11	36	2	70		
6/2 1410	5,550	72	8.4	96	78.6	7.3	0.66[c]		2.5 / 0.11		0.0 / 0.00	42 / 0.69		1.2 / 0.03			0.0			52[e]	14	33	0	18		
7/8 0805	731	78	7.0	84	133	7.5	1.12[c]		4.3 / 0.19		0.0 / 0.00	78 / 1.28		1.2 / 0.03			0.0			87[e]	15	56	0	10		
8/11 0850	836	78	7.7	93	131	7.5	1.20[c]		5.1 / 0.22		0.0 / 0.00	76 / 1.25		0.8 / 0.02			0.0			86[e]	15	60	0	16		
9/15 0740	1,130	70	8.2	91	134	7.5	12 / 0.60	6.9 / 0.57	6.4 / 0.28	1.3 / 0.03	0.0 / 0.00	80 / 1.31	5.0 / 0.10	1.0 / 0.03	0.0 / 0.00	0.1 / 0.01	0.0	12	Fe 0.03 Al 0.04[d] PO_4 0.10	84[f]	19	58	0	10		
10/3 0750	1,240	67	8.4	90	134	7.5	1.20[c]		5.3 / 0.23		0.0 / 0.00	75 / 1.23		3.0 / 0.08			0.0			88[e]	16	60	0	8		
11/4 0835	1,110	56	9.5	90	139	7.3	1.18[c]		5.2 / 0.23		0.0 / 0.00	77 / 1.26		1.5 / 0.04			0.0			91[e]	16	59	0	5		
12/9 1335	3,800	44	12.2	99	122	7.3	1.06[c]		4.8 / 0.21		0.0 / 0.00	64 / 1.05		4.3 / 0.12			0.1			80[e]	17	53	1	30		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FEATHER RIVER AT NICOLAUS (STA. 20)

Date and time sampled P.S.T.	Discharge in cfs Avg. M.D.	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in ppm / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										
1/1-8, 10-18	2,490				139	7.4	22 / 1.10	0.5 / 0.04	6.0 / 0.26		0 / 0.00	68 / 1.11								92[g]	19	57	1			USGS
1/19-26	3,220				156	7.3	24 / 1.20	1.0 / 0.08	6.2 / 0.27		0 / 0.00	67 / 1.10								104[g]	17	64	9			
1/27-31 2/1-2,4-7	6,300				121	7.3	18 / 0.90	0.5 / 0.04	5.1 / 0.22		0 / 0.00	49 / 0.80								86[g]	19	47	7			
2/8-12	66,100				72.9	6.9	11 / 0.55	1.8 / 0.15	2.2 / 0.10		0 / 0.00	26 / 0.43								66[g]	12	35	14			
2/13-14, 17-29	7,150				106	6.8	17 / 0.85	0.4 / 0.03	3.6 / 0.16		0 / 0.00	50 / 0.82								71[g]	15	44	3			
3/1-2, 4	4,620				114	7.0	11 / 0.55	4.7 / 0.39	4.1 / 0.18		0 / 0.00	60 / 0.98								72[g]	16	47	0			
3/5-26	18,800				81.3	7.3	7.2 / 0.36	3.6 / 0.30	2.8 / 0.12		0 / 0.00	42 / 0.69								59[g]	15	33	0			
3/27-31	15,800				70.2	7.5	7.6 / 0.38	2.9 / 0.24	2.4 / 0.10		0 / 0.00	40 / 0.66								50[g]	14	31	0			
4/1-10	13,200				78.7	7.5	9.6 / 0.48	3.2 / 0.26	2.6 / 0.11		0 / 0.00	38 / 0.62								73[g]	13	37	6			
4/11-16	9,400				80.6	7.0	8.8 / 0.44	3.4 / 0.28	2.6 / 0.11		0 / 0.00	42 / 0.69								74[g]	13	36	2			
4/17-24	5,820				82.5	7.1	11 / 0.55	2.6 / 0.21	3.0 / 0.13		0 / 0.00	43 / 0.70								71[g]	15	38	3			
5/1-8	4,740				89.9	7.0	10 / 0.50	3.6 / 0.30	3.1 / 0.13		0 / 0.00	46 / 0.75								83[g]	14	40	2			
5/9-19	5,130				83.5	7.5	10 / 0.50	2.2 / 0.18	3.0 / 0.13		0 / 0.00	43 / 0.70								68[g]	16	34	0			
5/20-23, 25-31	4,320				87.8	7.4	10 / 0.50	2.9 / 0.24	2.9 / 0.13		0 / 0.00	44 / 0.72								67[g]	15	37	1			
6/1-9	4,450				90.0	6.3	8.6 / 0.43	3.3 / 0.27	3.6 / 0.16		0 / 0.00	49 / 0.80								64[g]	19	35	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FEATHER RIVER AT NICOLAUS (STA. 20 continued)

Date and time sampled P.S.T.	Discharge in cfs Avg. M.D.	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										
6/10-19	2,140				104	7.1	9.6 / 0.48	4.9 / 0.40	4.1 / 0.18		0 / 0.00	58 / 0.95								75[g]	17	44	0			USGS
6/21-22, 24, 27-30	1,190				124	7.3	11 / 0.55	5.8 / 0.48	4.8 / 0.21		0 / 0.00	70 / 1.15								86[g]	17	52	0			
7/1-5, 7-9	824				137	7.3	12 / 0.60	5.8 / 0.48	6.4 / 0.28		0 / 0.00	74 / 1.21								102[g]	21	54	0			
7/6	850	79			143	7.2	18 / 0.90	4.1 / 0.34	6.6 / 0.29		0 / 0.00	75 / 1.23								98[g]	19	62	0			
7/10-14 21-22	696				141	7.2	12 / 0.60	6.3 / 0.52	7.0 / 0.30		0 / 0.00	75 / 1.23								93[g]	21	56	0			
7/23-31	692				137	7.2	14 / 0.70	5.6 / 0.46	5.9 / 0.26		0 / 0.00	76 / 1.25								98[g]	18	58	0			
8/1-10	790				139	7.9	13 / 0.65	6.2 / 0.51	6.1 / 0.27		0 / 0.00	78 / 1.28								91[g]	19	58	0			
8/11-12, 14, 16-20	648				146	7.4	14 / 0.70	5.6 / 0.46	6.2 / 0.27		0 / 0.00	80 / 1.31								94[g]	19	58	0			
8/21-31	709				147	7.0	13 / 0.65	6.4 / 0.53	6.2 / 0.27		0 / 0.00	83 / 1.36								92[g]	19	59	0			
9/1-8	780				149	7.3	14 / 0.70	6.6 / 0.54	6.1 / 0.27		0 / 0.00	73 / 1.20								95[g]	18	62	2			
9/10-20	1,070				139	7.5	13 / 0.65	5.7 / 0.47	6.5 / 0.28		0 / 0.00	77 / 1.26								81[g]	20	56	0			
9/21-30	1,110				143	7.4	14 / 0.70	5.1 / 0.42	6.5 / 0.28		0 / 0.00	66 / 1.08								99[g]	20	56	2			
10/1-10	1,140				145	7.4	14 / 0.70	5.6 / 0.46	6.0 / 0.26		0 / 0.00	74 / 1.21								83[g]	18	58	0			
10/11-20	846				148	7.5	14 / 0.70	6.1 / 0.50	6.1 / 0.27		0 / 0.00	82 / 1.34								94[g]	18	60	0			
10/21-23, 25-31	846				150	7.5	14 / 0.70	6.1 / 0.50	7.4 / 0.32		0 / 0.00	83 / 1.36								99[g]	21	60	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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32505-D-E 6-61 200 SPO

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FEATHER RIVER AT NICOLAUS (STA. 20 continued)

Date and time sampled P.S.T.	Discharge in cfs Avg. M.D.	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										
11/1-12	1,140				142	8.2	13 / 0.65	6.2 / 0.51	6.1 / 0.27		0 / 0.00	80 / 1.31								95[g]	19	58	0			USGS
11/13-22	3,020				137	7.7	13 / 0.65	5.5 / 0.45	6.2 / 0.27		0 / 0.00	70 / 1.15								89[g]	20	55	0			
11/23-24	2,780				189	7.7	18 / 0.90	8.3 / 0.68	7.1 / 0.31		0 / 0.00	78 / 1.28								148[g]	16	79	15			
11/25-30	4,530				127	7.7	11 / 0.55	5.8 / 0.48	5.8 / 0.25		0 / 0.00	63 / 1.03								89[g]	20	51	0			
12/1-11	5,090				121	7.5	10 / 0.50	6.1 / 0.50	5.4 / 0.23		0 / 0.00	57 / 0.93								86[g]	19	50	3			
12/12-20	3,890				118	7.3	10 / 0.50	5.8 / 0.48	5.5 / 0.24		0 / 0.00	58 / 0.95								82[g]	20	49	1			
12/21-31	3,640				117	7.5	10 / 0.50	5.8 / 0.48	5.3 / 0.23		0 / 0.00	60 / 0.98								84[g]	19	49	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

32505-D-8 6-61 200 SPO

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FEATHER RIVER NEAR OROVILLE (STA. 19)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/7 1600	1,650	39	14.0	106	149	7.1[a]	1.26[c]		7.3 / 0.32		0.0 / 0.00	72 / 1.18		2.8 / 0.08			0.1			105[e]	20	63	4	4	Maximum 620 Minimum 0.23 Median 2.3	
2/11 1600	12,800	44	12.5	102	66.0	7.1[a]	0.56[c]		2.1 / 0.09		0.0 / 0.00	30 / 0.49		2.0 / 0.06			0.1			46[e]	14	28	3	70		
3/16 1005	7,880	46	11.7	98	75.4	7.3[a]	0.84[c]		2.9 / 0.13		0.0 / 0.00	37 / 0.61		7.0 / 0.20			0.0			53[e]	13	42	12	2		
4/14 1320	6,550	54	11.0	102	66.8	7.3[a]	0.57[c]		2.1 / 0.09		0.0 / 0.00	36 / 0.59		1.7 / 0.05			0.0			47[e]	14	29	0	2.8		
5/12 1045	5,460	57	10.2	98	67.5	7.3[a]	7.4 / 0.37	3.0 / 0.25	2.2 / 0.10	0.3 / 0.01	0.0 / 0.00	40 / 0.66	0.2 / 0.00	1.2 / 0.03	2.0 / 0.03	0.0 / 0.00	0.1	12	Fe 0.01 Al 0.09[d] PO_4 0.05	48[f]	14	31	0	4		
6/9 1305	3,640	67	9.5	102	85.1	7.7[a]	0.72[c]		3.2 / 0.14		0.0 / 0.00	50 / 0.82		0.8 / 0.02			0.0			60[e]	16	36	0	25		
7/8 0915	2,690	70	8.7	97	101	7.5[a]	1.36[c]		3.3 / 0.14		0.0 / 0.00	64 / 1.05		1.0 / 0.03			0.0			71[e]	9	68	16	2		
8/12 0910	2,430	72	8.6	98	111	7.3[a]	1.10[c]		4.5 / 0.20		0.0 / 0.00	66 / 1.08		1.7 / 0.05			0.0			78[e]	15	55	1	5		
9/9 0955	1,630	69	9.0	99	115	7.5[a]	12 / 0.60	4.4 / 0.36	5.7 / 0.25	1.2 / 0.03	0.0 / 0.00	73 / 1.20	2.0 / 0.04	1.5 / 0.04	0.0 / 0.00	0.0 / 0.00	0.2	13	Fe 0.01 Al 0.07[d] PO_4 0.00	76[f]	20	48	0	3		
10/14 1025	1,270	58	10.0	97	125	7.9[b]	1.10[c]		5.6 / 0.24		0.0 / 0.00	73 / 1.20		3.0 / 0.08			0.1			88[e]	18	55	0	3		
11/11 1010	1,360	52	11.0	99	124	7.3[a]	1.06[c]		4.9 / 0.21		0.0 / 0.00	70 / 1.15		1.2 / 0.03			0.0			87[e]	17	53	0	1		
12/16 1110	2,950	42	13.0	103	116	7.3[a]	1.04[c]		5.2 / 0.23		0.0 / 0.00	68 / 1.11		4.0 / 0.11			0.0			82[e]	18	52	0	18		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FEATHER RIVER BELOW SHANGHAI BEND (STA. 20a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/7 0840	1,450	40	12.1	93	139	7.3	—/1.20[c]		6.0/0.26		0.0/0.00	79/1.29		3.0/0.08			0.1			95[e]	18	60	0	6	Maximum 2,400 Minimum 2.3 Median 23	
2/12 1510	22,700	47	11.5	97	67.2	7.2	—/0.54[c]		2.0/0.09		0.0/0.00	29/0.48		2.8/0.08			0.0			46[e]	14	27	3	150		
3/4 0900	3,800	47	11.0	93	106	7.1	—/0.96[c]		3.6/0.16		0.0/0.00	56/0.92		4.0/0.11			0.1			72[e]	14	48	2	10		
4/4 1355	12,700	55	10.4	97	71.7	7.3	—/0.62[c]		2.1/0.09		0.0/0.00	41/0.67		1.8/0.05			0.0			49[e]	13	31	0	7.5		
5/9 1325	6,700	64	9.8	102	75.4	7.3	8.0/0.40	3.6/0.30	2.1/0.09	0.6/0.02	0.0/0.00	42/0.69	3.0/0.06	1.2/0.03	0.0/0.00	0.1/0.01	0.0	15	Al 0.06 Zn 0.03[d] PO_4 0.05	55[f]	11	35	1	10		
6/2 1455	5,700	69	8.2	90	71.4	7.3	—/0.62[c]		2.0/0.09		0.0/0.00	39/0.64		1.0/0.03			0.0			49[e]	13	31	0	18		
7/7 1335	870	80	8.1	100	130	7.5	—/1.16[c]		4.1/0.18		0.0/0.00	76/1.25		2.0/0.06			0.0			89[e]	13	58	0	10		
8/11 1225	717	82	8.0	100	130	7.5	—/1.24[c]		5.1/0.22		0.0/0.00	76/1.25		3.0/0.08			0.0			89[e]	15	62	0	18		
9/15 0850	1,180	72	8.2	93	135	7.4	12/0.60	6.7/0.55	6.5/0.28	1.3/0.03	0.0/0.00	79/1.29	6.8/0.14	2.4/0.07	0.3/0.00	0.0/0.00	0.0	13	Fe 0.03 Zn 0.02[d] PO_4 0.05	88[f]	19	58	0	7		
10/3 1320	1,380	70	8.8	98	136	7.5	—/1.20[c]		5.6/0.24		0.0/0.00	76/1.25		3.0/0.08			0.1			93[e]	17	60	0	15		
11/4 0915	1,100	56	9.3	88	140	7.3	—/1.16[c]		5.7/0.25		0.0/0.00	79/1.29		2.0/0.06			0.0			95[e]	18	58	0	10		
12/9 1140	3,480	43	12.1	97	119	7.3	—/1.06[c]		4.6/0.20		0.0/0.00	66/1.08		4.0/0.11			0.1			81[e]	16	53	0	50		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FEATHER RIVER NEAR OROVILLE (STA. 19)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/7 1600	1,650	39	14.0	106	149	7.1[a]	1.26[c]		7.3 / 0.32		0.0 / 0.00	72 / 1.18		2.8 / 0.08			0.1			105[e]	20	63	4	4	Maximum 620 Minimum 0.23 Median 2.3	
2/11 1600	12,800	44	12.5	102	66.0	7.1[a]	0.56[c]		2.1 / 0.09		0.0 / 0.00	30 / 0.49		2.0 / 0.06			0.1			46[e]	14	28	3	70		
3/16 1005	7,880	46	11.7	98	75.4	7.3[a]	0.84[c]		2.9 / 0.13		0.0 / 0.00	37 / 0.61		7.0 / 0.20			0.0			53[e]	13	42	12	2		
4/14 1320	6,550	54	11.0	102	66.8	7.3[a]	0.57[c]		2.1 / 0.09		0.0 / 0.00	36 / 0.59		1.7 / 0.05			0.0			47[e]	14	29	0	2.8		
5/12 1045	5,460	57	10.2	98	67.5	7.3[a]	7.4 / 0.37	3.0 / 0.25	2.2 / 0.10	0.3 / 0.01	0.0 / 0.00	40 / 0.66	0.2 / 0.00	1.2 / 0.03	2.0 / 0.03	0.0 / 0.00	0.1	12	Fe 0.01 Al 0.09[d] PO_4 0.05	48[f]	14	31	0	4		
6/9 1305	3,640	67	9.5	102	85.1	7.7[a]	0.72[c]		3.2 / 0.14		0.0 / 0.00	50 / 0.82		0.8 / 0.02			0.0			60[e]	16	36	0	25		
7/8 0915	2,690	70	8.7	97	101	7.5[a]	1.36[c]		3.3 / 0.14		0.0 / 0.00	64 / 1.05		1.0 / 0.03			0.0			71[e]	9	68	16	2		
8/12 0910	2,430	72	8.6	98	111	7.3[a]	1.10[c]		4.5 / 0.20		0.0 / 0.00	66 / 1.08		1.7 / 0.05			0.0			78[e]	15	55	1	5		
9/9 0955	1,630	69	9.0	99	115	7.5[a]	12 / 0.60	4.4 / 0.36	5.7 / 0.25	1.2 / 0.03	0.0 / 0.00	73 / 1.20	2.0 / 0.04	1.5 / 0.04	0.0 / 0.00	0.0 / 0.00	0.2	13	Fe 0.01 Al 0.07[d] PO_4 0.00	76[f]	20	48	0	3		
10/14 1025	1,270	58	10.0	97	125	7.9[b]	1.10[c]		5.6 / 0.24		0.0 / 0.00	73 / 1.20		3.0 / 0.08			0.1			88[e]	18	55	0	3		
11/11 1010	1,360	52	11.0	99	124	7.3[a]	1.06[c]		4.9 / 0.21		0.0 / 0.00	70 / 1.15		1.2 / 0.03			0.0			87[e]	17	53	0	1		
12/16 1110	2,950	42	13.0	103	116	7.3[a]	1.04[c]		5.2 / 0.23		0.0 / 0.00	68 / 1.11		4.0 / 0.11			0.0			82[e]	18	52	0	18		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FEATHER RIVER BELOW SHANGHAI BEND (STA. 20a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH [a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform [h] MPN/ml	Analyzed by [i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/7 0840	1,450	40	12.1	93	139	7.3	1.20[c]		6.0 / 0.26		0.0 / 0.00	79 / 1.29		3.0 / 0.08			0.1			95[e]	18	60	0	6	Maximum 2,400 Minimum 2.3 Median 23	
2/12 1510	22,700	47	11.5	97	67.2	7.2	0.54[c]		2.0 / 0.09		0.0 / 0.00	29 / 0.48		2.8 / 0.08			0.0			46[e]	14	27	3	150		
3/4 0900	3,800	47	11.0	93	106	7.1	0.96[c]		3.6 / 0.16		0.0 / 0.00	56 / 0.92		4.0 / 0.11			0.1			72[e]	14	48	2	10		
4/4 1355	12,700	55	10.4	97	71.7	7.3	0.62[c]		2.1 / 0.09		0.0 / 0.00	41 / 0.67		1.8 / 0.05			0.0			49[e]	13	31	0	7.5		
5/9 1325	6,700	64	9.8	102	75.4	7.3	8.0 / 0.40	3.6 / 0.30	2.1 / 0.09	0.6 / 0.02	0.0 / 0.00	42 / 0.69	3.0 / 0.06	1.2 / 0.03	0.0 / 0.00	0.1 / 0.01	0.0	15	Al 0.06 Zn 0.03 [d] PO_4 0.05	55[f]	11	35	1	10		
6/2 1455	5,700	69	8.2	90	71.4	7.3	0.62[c]		2.0 / 0.09		0.0 / 0.00	39 / 0.64		1.0 / 0.03			0.0			49[e]	13	31	0	18		
7/7 1335	870	80	8.1	100	130	7.5	1.16[c]		4.1 / 0.18		0.0 / 0.00	76 / 1.25		2.0 / 0.06			0.0			89[e]	13	58	0	10		
8/11 1225	717	82	8.0	100	130	7.5	1.24[c]		5.1 / 0.22		0.0 / 0.00	76 / 1.25		3.0 / 0.08			0.0			89[e]	15	62	0	18		
9/15 0850	1,180	72	8.2	93	135	7.4	12 / 0.60	6.7 / 0.55	6.5 / 0.28	1.3 / 0.03	0.0 / 0.00	79 / 1.29	6.8 / 0.14	2.4 / 0.07	0.3 / 0.00	0.0 / 0.00	0.0	13	Fe 0.03 Zn 0.02 [d] PO_4 0.05	88[f]	19	58	0	7		
10/3 1320	1,380	70	8.8	98	136	7.5	1.20[c]		5.6 / 0.24		0.0 / 0.00	76 / 1.25		3.0 / 0.08			0.1			93[e]	17	60	0	15		
11/4 0915	1,100	56	9.3	88	140	7.3	1.16[c]		5.7 / 0.25		0.0 / 0.00	79 / 1.29		2.0 / 0.06			0.0			95[e]	18	58	0	10		
12/9 1140	3,480	43	12.1	97	119	7.3	1.06[c]		4.6 / 0.20		0.0 / 0.00	66 / 1.08		4.0 / 0.11			0.1			81[e]	16	53	0	50		

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FRESNO RIVER NEAR DAULTON (STA. 113)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1960																										USGS
1/5 1115	6.8	42	11.9	94	238	7.1	1.04[c]		25 / 1.09		0.0 / 0.00	56 / 0.92		22 / 0.62			0.2			164[e]	51	52	6	10		
2/3 0800	98	44	11.6	94	103	7.2	0.60[c]		8.9 / 0.39		0.0 / 0.00	30 / 0.49		11 / 0.31			0.0			71[e]	39	30	5	100		
3/2 1300	36	55	10.4	98	152	7.3	0.82[c]		14 / 0.61		0.0 / 0.00	50 / 0.82		21 / 0.59			0.1			105[e]	43	41	0	4		
4/5 1010	88	65	9.2	98	96.7	7.3	0.55[c]		8.8 / 0.38		0.0 / 0.00	40 / 0.66		9.6 / 0.27			0.0			67[e]	42	26	0	6		
5/4 1500	100	65	8.9	94	90.2	7.3	8.8 / 0.44	1.0 / 0.08	7.6 / 0.33	1.3 / 0.03	0.0 / 0.00	34 / 0.56	2.0 / 0.04	8.2 / 0.23	0.1 / 0.00	0.1 / 0.01	0.0	23	Fe 0.07, Al 0.12, PO_4 0.00[d]	69[f]	38	26	0	4		
6/1 1350	60	81	7.4	92	69.0	7.1	0.44[c]		5.7 / 0.25		0.0 / 0.00	26 / 0.43		8.0 / 0.23			0.1			47[e]	36	22	1	35		
7/6 0905	3.5	78	8.3	100	162	7.3	0.79[c]		16 / 0.70		0.0 / 0.00	46 / 0.75		26 / 0.73			0.1			111[e]	48	39	1	2		
8/10	Dry --	Not Sampled																								
9/6	Dry --	Not Sampled																							Median 9.6	
10/	Dry --	Not Sampled																								
11/2 1405	3	64	10.1	105	373	7.7	1.53[c]		45 / 1.96		0.0 / 0.00	62 / 1.02		89 / 2.51			0.2			257[e]	56	76	25	1	Max. 230	
12/14 1110	19	44	12.0	98	186	7.3	1.14[c]		19 / 0.83		0.0 / 0.00	73 / 1.20		30 / 0.85			0.0			128[e]	42	57	0	1	Min. 2.3	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

GRANT LINE CANAL AT TRACY ROAD BRIDGE (STA. 103a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Tidal																									USGS
1/7 1545		44	12.2	99	847	7.5	3.77[c]		98 / 4.26		0.0 / 0.00	140 / 2.29		155 / 4.37			0.4			493[e]	53	188	73	15	Maximum 2400 Minimum 0.62 Median 62	
2/16 0845		53	8.2	75	469	7.3	2.16[c]		48 / 2.09		0.0 / 0.00	102 / 1.67		66 / 1.86			0.1			273[e]	49	108	24	90		
3/15 1120		58	12.5	122	1,080	8.1	4.88[c]		125 / 5.44		0.0 / 0.00	159 / 2.61		199 / 5.61			0.4			629[e]	53	244	114	25		
4/15 0815		63	8.4	87	1,110	7.9	5.24[c]		119 / 5.18		0.0 / 0.00	190 / 3.11		209 / 5.89			0.4			646[e]	50	262	106	20		
5/6 0835		65	11.2	118	851	8.1	46 / 2.30	20 / 1.62	99 / 4.31	5.8 / 0.15	0.0 / 0.00	168 / 2.75	75 / 1.56	146 / 4.12	1.2 / 0.02	0.2 / 0.01	0.3	19	Fe 0.04 Cu 0.01 PO_4 0.45 Al 0.09 [d]	496[f]	51	196	58	100		
6/10 0550		72	6.8	77	621	7.7	3.12[c]		63 / 2.74		0.0 / 0.00	128 / 2.10		104 / 2.93			0.2			362[e]	47	156	51	110		
7/15 0750		74	7.5	87	635	8.1	3.16[c]		62 / 2.70		0.0 / 0.00	140 / 2.29		115 / 3.24			0.2			370[e]	46	158	43	30		
8/5 0805		75	7.4	86	467	7.7	2.00[c]		55 / 2.39		0.0 / 0.00	90 / 1.48		80 / 2.26			0.0			272[e]	54	100	26	30		
9/8 1150		74	7.3	84	882	7.9	43 / 2.15	19 / 1.60	115 / 5.00	6.2 / 0.16	0.0 / 0.00	165 / 2.70	45 / 0.94	182 / 5.13	0.0 / 0.00	0.1 / 0.01	0.3	6.5	Fe 0.04 PO 0.30 Al 0.13 Zn 0.15 [d]	498[f]	56	188	53	20		
10/6 1530		72	13.3	151	1,160	8.1	5.00[c]		120 / 5.22		0.0 / 0.00	180 / 2.95		224 / 6.32			0.3			675[e]	51	250	102	20		
11/11 0920		58	9.4	91	750	7.5	3.50[c]		86 / 3.74		0.0 / 0.00	129 / 2.11		138 / 3.89			0.2			436[e]	52	175	69	6		
12/16 0825		49	9.3	81	675	7.3	3.06[c]		78 / 3.39		0.0 / 0.00	118 / 1.93		118 / 3.33			0.0			393[e]	53	153	56	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

INDIAN CREEK NEAR CRESCENT MILLS (STA. 17d)

Date and time sampled P.S.T	Discharge in cfs	Temp. in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/7 1320	65	37	12.0	88	178	7.1	1.56[c]		9.0 / 0.39		0.0 / 0.00	97 / 1.59		4.8 / 0.14			0.1			121[e]	20	78	0	4	Maximum 7,000 Minimum 0.23 Median 13	
2/11 1350	946	45	10.4	86	89.1	7.1	0.80[c]		3.9 / 0.17		0.0 / 0.00	44 / 0.72		2.8 / 0.08			0.0			61[e]	18	40	4	100		
3/11 1530	1,010	43	10.5	85	93.6	7.2	0.80[c]		4.0 / 0.17		0.0 / 0.00	46 / 0.75		3.0 / 0.08			0.1			64[e]	18	40	2	175		
4/14 1000	658	50	9.8	86	91.5	7.3	0.68[c]		6.4 / 0.28		0.0 / 0.00	54 / 0.89		1.7 / 0.05			0.0			62[e]	29	34	0	5		
5/12 0845	325	53	8.8	81	93.6	7.1	9.2 / 0.46	3.6 / 0.30	3.8 / 0.17	0.9 / 0.02	0.0 / 0.00	55 / 0.90	0.2 / 0.00	1.6 / 0.05	0.2 / 0.00	0.1 / 0.01	0.1	20	Fe 0.11 PO_4 0.15[d] Al 0.08	67[f]	18	38	0	2		
6/9 0920	86	65	7.9	83	135	7.3	1.16[c]		5.2 / 0.23		0.0 / 0.00	80 / 1.31		5.0 / 0.14			0.0			92[e]	17	58	0	3		
7/8 0645	19	62	6.5	66	232	6.9	1.94[c]		11 / 0.48		0.0 / 0.00	139 / 2.28		4.8 / 0.14			0.1			158[e]	20	97	0	10		
8/12 0815	12.6	62	6.8	69	255	7.1	2.06[c]		14 / 0.61		0.0 / 0.00	150 / 2.46		6.5 / 0.18			0.2			174[e]	23	103	0	15		
9/9 0745	9.9	57	7.1	68	256	7.0	26 / 1.30	9.0 / 0.74	16 / 0.70	1.1 / 0.03	0.0 / 0.00	152 / 2.49	10 / 0.21	6.5 / 0.18	0.0 / 0.00	0.0 / 0.00	0.1	22	Fe 0.01 PO_4 0.10[d]	166[f]	25	102	0	8		
10/14 0840	17	42	8.6	68	223	7.0	1.88[c]		11 / 0.48		0.0 / 0.00	124 / 2.03		6.0 / 0.17			0.2			152[e]	20	94	0	20		
11/11 0740	55	45	9.4	78	182	7.1	1.50[c]		8.2 / 0.36		0.0 / 0.00	97 / 1.59		2.8 / 0.08			0.1			124[e]	19	75	0	10		
12/16 1000	100	39	10.9	83	167	7.0	1.41[c]		8.6 / 0.37		0.0 / 0.00	92 / 1.51		7.0 / 0.20			0.1			114[e]	21	70	0	18		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

INDIAN SLOUGH NEAR BRENTWOOD (STA. 107)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Tidal																									USGS
1/11 1700		53	10.3	94	1,120	7.9	6.56[c]		5.31		0.00	4.80		4.26			1.8			623[e]	45	328	88	18	Maximum >7,000 Minimum 0.62 Median 62.	
2/3 0745		52	8.2	74	1,310	7.9	5.70[c]		6.83		0.00	4.26		5.78			2.2			729[e]	55	285	72	35		
3/1 1600		55	12.5	118	1,810	8.1	6.76[c]		10.88		0.00	5.33		8.18			2.7			1008[e]	62	338	72	10		
4/12 0755		63	8.6	89	274	7.3	1.66[c]		1.04		0.00	1.25		0.85			0.2			152[e]	39	83	21	10		
5/3 0735		62	7.8	79	263	7.3	16 / 0.80	8.3 / 0.68	25 / 1.09	1.8 / 0.05	0.0 / 0.00	80 / 1.31	22 / 0.46	28 / 0.79	0.7 / 0.01	0.2 / 0.01	0.3	15	Fe 0.07 Al 0.19[d] PO_4 0.10 Cu 0.01 Pb 0.01	156[f]	42	74	8	33		
6/7 0630		73	6.1	70	220	7.3	1.48[c]		17 / 0.74		0.0 / 0.00	80 / 1.31		19 / 0.54			0.2			122[e]	33	74	8	70		
7/12 0730		73	5.3	61	362	7.3	1.85[c]		36 / 1.57		0.0 / 0.00	90 / 1.48		63 / 1.78			0.1			201[e]	46	92	18	40		
8/2 0800		76	5.8	68	603	7.3	2.14[c]		86 / 3.74		0.0 / 0.00	86 / 1.41		123 / 3.47			0.0			335[e]	64	107	36	30		
9/5 1325		73	7.1	81	889	7.3	28 / 1.40	20 / 1.66	133 / 5.79	4.0 / 0.10	0.0 / 0.00	125 / 2.05	53 / 1.10	203 / 5.72	1.6 / 0.03	0.1 / 0.01	0.5	15	Fe 0.12 PO_4 0.20[d] Al 0.12	520[f]	65	153	51	36		
10/4 0730		68	6.8	74	726	7.5	2.86[c]		81 / 3.52		0.0 / 0.00	126 / 2.07		134 / 3.78			0.5			405[e]	55	143	40	50		
11/8 0850		58	8.9	87	1,310	7.7	6.62[c]		150 / 6.52		8 / 0.27	304 / 4.98		156 / 4.40			2.2		Tot. Alk. 320	729[e]	50	331	64	65		
12/12 1520		50	10.0	88	1,300	8.1	7.12[c]		153 / 6.66		8 / 0.27	341 / 5.59		200 / 5.64			2.6		Tot. Alk. 357	724[e]	48	356	63	12		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

ITALIAN SLOUGH NEAR MOUTH (STA. 106)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Tidal																									USGS
1/12 0930		45	10.2	84	997	7.3	3.92[c]		132 / 5.74		0.0 / 0.00	134 / 2.20		191 / 5.39			1.2			570[e]	59	196	86	18	Maximum 7,000 Minimum 2.3 Median 23	
2/2 1505		52	10.1	92	931	7.3	3.80[c]		104 / 4.52		0.0 / 0.00	132 / 2.16		170 / 4.79			0.7			533[e]	54	190	82	35		
3/2 0825		52	9.3	84	1,040	7.5	3.70[c]		144 / 6.26		0.0 / 0.00	142 / 2.33		220 / 6.20			1.7			594[e]	63	185	69	10		
4/11 1550		65	11.2	118	334	8.1	1.94[c]		29 / 1.26		0.0 / 0.00	74 / 1.21		43 / 1.21			0.2			191[e]	39	97	36	8		
5/2 1245		64	9.2	96	243	7.3	17 / 0.85	7.7 / 0.63	20 / 0.87	1.8 / 0.05	0.0 / 0.00	65 / 1.07	25 / 0.52	27 / 0.76	1.3 / 0.02	0.2 / 0.01	0.1	16	Fe 0.04 Cu 0.01[d] Al 0.14 PO_4 0.15	148[f]	36	74	21	27		
6/6 1415		76	7.9	93	224	7.4	1.56[c]		18 / 0.78		0.0 / 0.00	80 / 1.31		22 / 0.62			0.2			128[e]	33	78	12	45		
7/11 1300		80	7.8	96	296	7.5	1.61[c]		26 / 1.13		0.0 / 0.00	83 / 1.36		45 / 1.27			0.2			169[e]	41	80	12	30		
8/1 1910		78	8.1	98	457	7.5	1.82[c]		57 / 2.48		0.0 / 0.00	82 / 1.34		83 / 2.34			0.1			261[e]	58	91	24	25		
9/5 1355		77	7.8	93	653	7.3	21 / 1.05	14 / 1.13	100 / 4.35	3.6 / 0.09	0.0 / 0.00	87 / 1.43	37 / 0.77	149 / 4.20	0.8 / 0.01	0.1 / 0.01	0.0	15	Fe 0.16 Zn 0.01[d] Al 0.14 PO_4 0.20	384[f]	66	109	38	72		
10/3 1655		73	11.4	130	535	8.1	2.10[c]		60 / 2.61		0.0 / 0.00	96 / 1.57		98 / 2.76			0.1			305[e]	55	105	26	30		
11/7 1415		60	7.7	77	529	7.3	2.39[c]		58 / 2.52		0.0 / 0.00	101 / 1.66		82 / 2.31			0.2			302[e]	51	120	37	20		
12/12 1555		49	9.3	81	818	7.4	3.76[c]		101 / 4.39		0.0 / 0.00	147 / 2.41		155 / 4.37			0.3			467[e]	54	188	67	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

KAWEAH RIVER NEAR THREE RIVERS (STA. 35)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1960																										USGS
1/5 1500	37	42	12.0	95	172	7.7	1.36[c]		9.5 / 0.41		0.0 / 0.00	80 / 1.31		9.0 / 0.25			0.0			114[e]	23	68	2	20		
2/3 1445	250	46	11.3	96	105	7.3	0.88[c]		5.1 / 0.22		0.0 / 0.00	47 / 0.77		8.0 / 0.23			0.1			69.5[e]	20	44	5	8		
3/3 0750	159	46	11.6	99	116	7.3	1.00[c]		5.6 / 0.24		0.0 / 0.00	60 / 0.98		5.0 / 0.14			0.0			76.6[e]	19	50	1	2		
4/5 1430	766	61	9.8	99	48.7	7.3	0.48[c]		2.0 / 0.09		0.0 / 0.00	26 / 0.43		2.0 / 0.06			0.1			32.5[e]	16	24	3	3		
5/5 0935	536	52	11.0	99	55.8	7.3	7.2 / 0.36	0.5 / 0.04	2.6 / 0.11	0.8 / 0.02	0.0 / 0.00	29 / 0.48	0.0 / 0.00	1.2 / 0.03	0.3 / 0.00	0.2 / 0.01	0.0	12	Fe 0.01 Cu 0.01 Al 0.79 Zn 0.02 PO_4 0.05 [d]	39[f]	21	20	0	5		
6/2 0815	968	63	9.2	95	33.1	7.1	0.28[c]		1.6 / 0.07		0.0 / 0.00	17 / 0.28		1.2 / 0.03			0.0			21.8[e]	20	14	0	1		
7/6 1620	97	82	7.8	98	76.9	7.9	0.59[c]		4.0 / 0.17		0.0 / 0.00	40 / 0.66		3.5 / 0.10			0.0			50.9[e]	22	30	0	1		
8/9 0810	39	74	7.9	92	123	7.5	0.96[c]		7.2 / 0.31		0.0 / 0.00	62 / 1.02		10 / 0.28			0.0			81.5[e]	24	48	0	1		
9/7 0935	24	71	8.7	98	145	7.7	15 / 0.75	3.9 / 0.32	8.9 / 0.39	2.2 / 0.06	0.0 / 0.00	74 / 1.21	5.0 / 0.10	8.6 / 0.24	0.3 / 0.00	0.2 / 0.01	0.0	14	Fe 0.01 PO_4 0.05 Al 0.02 [d]	94[f]	26	54	0	2		
10/5 1010	17	67	9.2	99	163	7.5	1.14[c]		8.6 / 0.37		0.0 / 0.00	72 / 1.18		11 / 0.31			0.1			108[e]	25	57	0	4	Median 2.3	
11/3 1025	28	59	9.4	92	156	7.3	1.12[c]		8.9 / 0.39		0.0 / 0.00	72 / 1.18		9.0 / 0.25			0.1			103[e]	26	56	0	1	Max. 62	
12/14 1615	80	47	11.9	100	125	7.7	1.00[c]		6.6 / 0.29		0.0 / 0.00	64 / 1.05		5.0 / 0.14			0.1			82.7[e]	22	50	0	10	Min. 0.23	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

KERN RIVER NEAR BAKERSFIELD (STA. 36)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/6 0830	164	38	12.0	90	252	7.4	22 / 1.10	4.6 / 0.38	24 / 1.04	2.7 / 0.07	0.0 / 0.00	100 / 1.64	25 / 0.52	12 / 0.34	0.4 / 0.01	0.5 / 0.03	0.1	21		161[f]	40	74	0	20		
2/4 1135	329	47	10.9	92	219	7.4	1.52[c]		18 / 0.98		0.0 / 0.00	94 / 1.54		13 / 0.37			0.1			141[e]	34	76	0	140		
3/3 1445	306	54	11.5	107	214	7.8	1.38[c]		19 / 0.83		0.0 / 0.00	94 / 1.54		12 / 0.34			0.1			137[e]	38	69	0	4		
4/6 0815	436	63	8.8	91	137	7.3	0.96[c]		11 / 0.48		0.0 / 0.00	62 / 1.02		6.2 / 0.17			0.2			88[e]	33	48	0	6		
5/5 1445	271	66	10.9	116	213	7.9	18 / 0.90	4.1 / 0.34	20 / 0.87	2.8 / 0.07	0.0 / 0.00	103 / 1.64	14 / 0.29	9.5 / 0.27	0.2 / 0.00	0.4 / 0.02	0.2	9.5	Al 0.77 Cu 0.01 PO_4 0.05 Zn 0.01[d]	130[f]	40	62	0	5		
6/2 1200	1049	72	8.8	100	168	7.7	1.10[c]		15 / 0.65		0.0 / 0.00	83 / 1.36		10 / 0.28			0.1			109[e]	37	55	0	3		
7/7 1025	558	75	7.6	89	131	7.3	0.82[c]		11 / 0.48		0.0 / 0.00	65 / 1.07		6.5 / 0.18			0.1			84.5[e]	37	41	0	3		
8/9 1110	550	78	8.5	102	173	7.7	1.02[c]		17 / 0.74		0.0 / 0.00	82 / 1.34		12 / 0.34			0.1			111[e]	42	51	0	3		
9/7 1405	234	77	8.6	102	217	7.7	17 / 0.85	4.3 / 0.35	22 / 0.96	2.4 / 0.06	0.0 / 0.00	98 / 1.61	18 / 0.37	10 / 0.28	0.7 / 0.01	0.3 / 0.02	0.2	13	Fe 0.01 Cu 0.01 Al 0.05 As 0.01 PO_4 0.10[d]	136[f]	43	60	0	5		
10/5 1340	165	72	8.5	96	237	7.5	1.32[c]		24 / 1.04		0.0 / 0.00	98 / 1.61		12 / 0.34			0.2			152[e]	44	66	0	5	Median 5.6	
11/3 1325	160	59	9.2	90	231	7.3	1.22[c]		23 / 1.00		0.0 / 0.00	89 / 1.46		10 / 0.28			0.4			149[e]	45	61	0	1	Max. 1300	
12/15 0845	209	44	11.5	93	216	7.3	1.22[c]		20 / 0.87		0.0 / 0.00	94 / 1.54		9.8 / 0.28			0.2			139[e]	42	61	0	15	Min. 0.23	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

KERN RIVER BELOW ISABELLA DAM (STA. 36a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/4 1130	8 (est.)	46	10.0	99	218	7.1	1.26[c]		20 / 0.87		0.0 / 0.00	108 / 1.77		9.0 / 0.25			0.2			138[e]	41	63	0	25		
2/1 1130	18	44	11.0	98	224	7.8	1.50[c]		20 / 0.87		0.0 / 0.00	111 / 1.82		14 / 0.39			0.1			142[e]	37	75	0	8		
2/29 1130	3	50	10.2	98	225	7.4	1.46[c]		20 / 0.87		0.0 / 0.00	112 / 1.84		9.0 / 0.25			0.1			142[e]	37	73	0	2		
4/1 1000	3	56	9.5	90	227	7.5	1.40[c]		20 / 0.87		0.0 / 0.00	112 / 1.84		9.0 / 0.25			0.2			143[e]	38	70	0	6		
5/2 1400	3	59	9.2	90	183	7.4	18 / 0.90	2.7 / 0.22	17 / 0.74	3.0 / 0.08	0.0 / 0.00	90 / 1.48	9.0 / 0.19	6.0 / 0.17	0.7 / 0.01	0.4 / 0.02	0.1	5.5	Fe 0.01 Zn 0.01 Al 0.13 Cu 0.01 PO_4 0.15 [d]	106[f]	38	56	0	5		
6/2 0930	474	61			160	7.2	1.00[c]		14 / 0.61		0.0 / 0.00	81 / 1.33		9.0 / 0.25			0.2			101[e]	38	50	0	1		
7/5 1400	320	69	8.1	89	141	6.9	0.88[c]		11 / 0.48		0.0 / 0.00	72 / 1.18		5.5 / 0.16			0.1			89[e]	35	44	0	3		
8/1 0930	315	73	7.8	89	164	6.8	1.04[c]		15 / 0.65		0.0 / 0.00	77 / 1.26		8.8 / 0.25			0.1			104[e]	38	52	0	4		
8/29 0950	196	70	8.1	90	200	8.1	11 / 0.55	8.4 / 0.69	18 / 0.78	2.3 / 0.06	0.0 / 0.00	97 / 1.59	11 / 0.23	8.3 / 0.23	3.0 / 0.05	0.3 / 0.02	0.2	14	Al 0.05 As 0.01 PO_4 0.35 [d]	124[f]	38	62	0	8		
10/14 1400	16	68	8.5	92	254	7.4	1.58[c]		24 / 1.04		0.0 / 0.00	116 / 1.90		7.5 / 0.21			0.2			161[e]	40	79	0	15	Median 2.3	
11/3 1000	22	59	9.1	89	261	7.1	1.54[c]		24 / 1.04		0.0 / 0.00	121 / 1.98		12 / 0.34			0.3			165[e]	40	77	0	2	Max. 7000	
12/5 1430	19	49	10.5	91	293	7.4	1.82[c]		28 / 1.22		0.0 / 0.00	145 / 2.38		10 / 0.28			0.3			185[e]	40	91	0	17	Min. 0.045	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

KERN RIVER NEAR KERNVILLE (STA. 36b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/4 1100	138	35	12.5	102	201	7.4	1.14[c]		20 / 0.87		0.0 / 0.00	90 / 1.48		9.5 / 0.27			0.3			140[e]	43	57	0	20		
2/1 1100	195	40	11.5	101	184	7.7	1.16[c]		17 / 0.74		0.0 / 0.00	83 / 1.36		12 / 0.34			0.2			128[e]	39	58	0	8		
2/29 1100	271	44	11.1	103	172	7.4	1.10[c]		16 / 0.70		0.0 / 0.00	68 / 1.11		7.0 / 0.20			0.1			120[e]	39	55	0	3		
4/1 0915	570	49	10.3	90	108	7.0	0.70[c]		9.0 / 0.39		0.0 / 0.00	50 / 0.82		5.0 / 0.14			0.2			75[e]	36	35	0	15		
5/2 1330	720	57	9.4	90	91.3	7.2	10 / 0.50	0.7 / 0.06	7.6 / 0.33	1.2 / 0.03	0.0 / 0.00	42 / 0.69	7.0 / 0.15	3.0 / 0.08	0.2 / 0.00	0.2 / 0.01	0.0	15	Fe 0.06 Al 0.52[d] PO_4 0.05 Cu 0.01	66[f]	36	28	0	5		
6/2 0815	1,070	60	9.0	90	53.3	6.9	0.34[c]		3.7 / 0.16		0.0 / 0.00	24 / 0.39		3.5 / 0.10			0.0			37[e]	32	17	0	3		
7/5 1100	300	72	8.0	91	96.8	7.0	0.52[c]		9.4 / 0.41		0.0 / 0.00	42 / 0.69		5.0 / 0.14			0.1			67[e]	44	26	0	4		
8/1 0900	220	71	8.1	91	115	7.0	0.68[c]		12 / 0.52		0.0 / 0.00	52 / 0.85		7.8 / 0.22			0.1			80[e]	43	34	0	5		
8/29 0850	100	66	8.5	90	167	8.0	12 / 0.60	3.2 / 0.26	18 / 0.78	1.6 / 0.04	0.0 / 0.00	76 / 1.25	12 / 0.25	7.2 / 0.20	0.2 / 0.00	0.2 / 0.01	0.2	21	Al 0.02 PO_4 0.00[d]	113[f]	46	43	0	2		
10/14 1330	170	66	8.6	91	159	7.4	0.84[c]		16 / 0.70		0.0 / 0.00	66 / 1.08		7.5 / 0.21			0.2			111[e]	45	42	0	10	Median 2.3	
11/3 0930	130	54	9.8	91	177	7.0	0.96[c]		18 / 0.78		0.0 / 0.00	75 / 1.23		9.2 / 0.26			0.2			123[e]	45	48	0	2	Max. 7000	
12/5 1400	195	44	11.0	89	174	7.3	0.98[c]		17 / 0.74		0.0 / 0.00	77 / 1.26		6.8 / 0.19			0.2			121[e]	43	49	0	10	Min. 0.45	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

KINGS RIVER BELOW NORTH FORK (STA. 33c)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/1 0930	130	38	12.5	96	69.3	6.9	—/0.48[c]		4.2/0.18		0.0/0.00	28/0.46		3.5/0.10			0.0			50[e]	27	24	1	20		
2/1 1130	220	43	11.4	94	57.9	6.9	—/0.42[c]		3.2/0.14		0.0/0.00	24/0.39		4.5/0.13			0.0			42[e]	25	21	1	45		
3/4 1300	318	51	11.7	107	61.6	6.8	—/0.52[c]		3.3/0.14		0.0/0.00	27/0.44		4.5/0.13			0.0			45[e]	21	26	4	2		
4/1 1100	1188	58	10.9	106	41.5	6.6	—/0.38[c]		2.2/0.10		0.0/0.00	18/0.30		1.5/0.04			0.1			30[e]	21	19	4	4		
5/2 0915	2238	56	11.5	110	27.9	6.6	3.2/0.16	0.2/0.02	1.3/0.06	0.4/0.01	0.0/0.00	11/0.18	2.0/0.04	1.2/0.03	0.0/0.00	0.0/0.00	0.0	8.7	Fe 0.01 Cu 0.01[d] PO_4 0.05	22[f]	24	9	0	3		
6/1 1145	3625	64	11.6	121	18.9	6.6	—/0.16[c]		1.9/0.08		0.0/0.00	9.0/0.15		2.0/0.06			0.0			14[e]	33	8	1	2		
7/5 1200	1264	65	10.6	112	30.7	6.9	—/0.20[c]		1.6/0.07		0.0/0.00	14/0.23		0.2/0.01			0.0			22[e]	26	10	0	4		
8/1 1100	1075	60	8.7	87	25.4	6.7	—/0.16[c]		2.0/0.09		0.0/0.00	11/0.18		3.0/0.08			0.0			18[e]	36	8	0	3		
9/6 1045	1035	60	10.4	104	30.3	7.1	3.0/0.15	0.7/0.06	2.5/0.11	0.4/0.01	0.0/0.00	17/0.28	1.0/0.02	1.2/0.03	0.0/0.00	0.1/0.01	0.0	7.1	Fe 0.03 PO_4 0.00[d]	24[f]	33	10	0	1		
10/3 1130	121	70	11.2	124	62.2	7.1	—/0.48[c]		3.4/0.15		0.0/0.00	25/0.41		2.6/0.07			0.0			45[e]	24	24	4	3	Median 2.3	
11/1 1200	138	60	11.5	114	66.4	6.9	—/0.45[c]		4.2/0.18		0.0/0.00	25/0.41		3.8/0.11			0.1			47[e]	29	22	2	1	Max. 2400	
12/5 1130	1015	41	10.9	85	53.0	6.9	—/0.38[c]		3.5/0.15		0.0/0.00	22/0.36		2.0/0.06			0.0			38[e]	28	19	1	8	Min. 0.045	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

KINGS RIVER BELOW PEOPLES WEIR (STA. 34)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/5 1350	72	45	11.8	98	189	7.3	1.44[c]		12/0.52		0.0/0.00	114/1.87		6.0/0.17			0.0			130[e]	27	72	0	15		
2/3 1215	41	52	7.9	71	201	7.1	1.54[c]		13/0.57		0.0/0.00	101/1.66		13/0.37			0.0			138[e]	27	77	0	8		
3/2 1700	241	54	10.1	94	110	7.3	0.92[c]		5.7/0.25		0.0/0.00	52/0.85		3.0/0.08			0.1			75.6[e]	21	46	3	5		
4/5 1312	62	72	8.4	95	140	7.3	1.18[c]		8.2/0.36		0.0/0.00	70/1.15		5.5/0.16			0.1			96.2[e]	23	59	2	6		
5/4 1820	76	69	8.8	97	113	7.7	11/0.55	3.5/0.29	6.4/0.28	2.1/0.05	0.0/0.00	58/0.95	7.0/0.15	1.2/0.03	0.6/0.01	0.0/0.00	0.0	12	Fe 0.03 Al 0.55[d] PO_4 0.15 Cu 0.01	73[f]	24	42	0	5		
6/2 0630	59	81	7.3	91	119	7.3	0.88[c]		7.5/0.33		0.0/0.00	60/0.98		5.8/0.16			0.0			81.7[e]	27	44	0	2		
7/6 1410	612	74	8.1	94	34.9	7.2	0.24[c]		2.2/0.10		0.0/0.00	14/0.23		3.8/0.11			0.0			23.2[e]	29	12	1	13		
8/9 0635	640	71	7.9	89	40.3	6.9	0.32[c]		2.6/0.11		0.0/0.00	19/0.31		4.0/0.11			0.1			27.6[e]	26	16	0	1		
9/7 0750	210	74	7.8	90	46.0	7.2	4.5/0.22	1.9/0.16	2.7/0.12	0.9/0.02	0.0/0.00	26/0.43	2.8/0.06	1.5/0.04	0.3/0.00	0.2/0.01	0.0	8.5	Fe 0.02 As 0.01[d] PO_4 0.00 Cu 0.01	36[f]	23	19	0	7		
10/5 0845	6	71	4.7	53	89.2	6.9	0.67[c]		3.7/0.16		0.0/0.00	42/0.69		2.2/0.06			0.0			61.2[e]	19	33	0	4	Median 37	
11/3 0905	60	62	7.9	80	179	7.3	1.28[c]		12/0.52		0.0/0.00	92/1.51		4.0/0.11			0.1			126[e]	29	64	0	1	Max. 7000	
12/14 1415	21	50	11.1	98	173	7.3	1.32[c]		11/0.48		0.0/0.00	92/1.51		4.4/0.12			0.1			118[e]	27	66	0	10	Min. 0.23	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

KINGS RIVER BELOW PINE FLAT DAM (STA. 33b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/1 1300	129	54	11.4	108	40.5	6.8	0.36[c]		1.8 / 0.08		0.0 / 0.00	16 / 0.26		1.5 / 0.04			0.0			30[e]	18	18	5	20		
2/2 1200	48	52	10.4	96	44.5	6.4	0.30[c]		1.9 / 0.08		0.0 / 0.00	16 / 0.26		4.0 / 0.11			0.2			33[e]	27	15	2	25		
3/4 1500	406	52	10.4	96	44.5	6.7	0.56[c]		1.8 / 0.08		0.0 / 0.00	24 / 0.39		5.5 / 0.16			0.0			33[e]	12	28	8	3		
4/1 1430	441	59	11.3	111	45.7	6.8	0.44[c]		1.7 / 0.07		0.0 / 0.00	23 / 0.38		2.2 / 0.06			0.0			34[e]	14	22	3	5		
5/3 1100	922	54	10.5	97	48.8	6.7	4.8 / 0.24	1.2 / 0.10	1.9 / 0.08	0.6 / 0.02	0.0 / 0.00	20 / 0.33	4.0 / 0.08	1.2 / 0.03	0.1 / 0.00	0.0 / 0.00	0.0	8.1	PO_4 0.05 Zn 0.01 Cu 0.01[d]	32[f]	18	17	1	2		
6/2 1230	3928	60	10.8	108	37.4	6.7	0.30[c]		1.9 / 0.08		0.0 / 0.00	17 / 0.28		3.8 / 0.11			0.0			28[e]	21	15	1	2		
7/5 1400	2335	63	10.4	107	24.7	6.7	0.18[c]		0.9 / 0.04		0.0 / 0.00	14 / 0.23		2.2 / 0.06			0.0			18[e]	18	9	0	4		
8/1 1220	1811	64	8.5	89	28.3	6.6	0.19[c]		1.7 / 0.07		0.0 / 0.00	14 / 0.23		1.0 / 0.03			0.0			21[e]	27	9	0	10		
9/6 1245	755	58	10.7	104	34.3	7.1	2.6 / 0.13	1.3 / 0.11	2.4 / 0.10	0.6 / 0.02	0.0 / 0.00	18 / 0.30	1.2 / 0.02	1.2 / 0.03	0.4 / 0.01	0.1 / 0.01	0.0	7.8	Fe 0.04 PO_4 0.05[d]	27[f]	28	12	0	1		
10/5 1330	131	75	10.6	124	34.1	7.0	0.28[c]		1.3 / 0.06		0.0 / 0.00	15 / 0.25		1.0 / 0.03			0.0			25[e]	18	14	2	10	Median 0.54	
11/1 1435	50	70	11.5	128	35.1	6.8	0.26[c]		1.5 / 0.07		0.0 / 0.00	15 / 0.25		1.8 / 0.05			0.0			26[e]	21	13	1	1	Max. 23	
12/5 1500	80	59	10.6	104	37.6	7.0	0.28[c]		1.9 / 0.08		0.0 / 0.00	18 / 0.30		1.0 / 0.03			0.1			28[e]	22	14	0	10	Min. 0.045	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

LINDSEY SLOUGH NEAR RIO VISTA (STA. 110)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Tidal																									USGS
1/11 1300		44	10.2	83	212	7.3	1.48[c]		15 / 0.65		0.0 / 0.00	100 / 1.64		10 / 0.28			0.1			129[e]	31	74	0	36	Maximum 7,000 Minimum <0.045 Median 62.	
2/2 1100		51	9.9	88	213	7.3	1.48[c]		15 / 0.65		0.0 / 0.00	86 / 1.41		14 / 0.39			0.0			130[e]	31	74	3	50		
3/1 1050		49	10.4	91	255	7.3	1.84[c]		18 / 0.78		0.0 / 0.00	100 / 1.64		18 / 0.51			0.2			155[e]	30	92	10	120		
4/11 1215		64	9.0	94	172	7.3	1.22[c]		11 / 0.48		0.0 / 0.00	74 / 1.21		10 / 0.28			0.1			105[e]	28	61	0	40		
5/2 0930		60	8.8	88	180	7.3	13 / 0.65	7.4 / 0.61	12 / 0.52	1.5 / 0.04	0.0 / 0.00	78 / 1.28	14 / 0.29	10 / 0.28	0.6 / 0.01	0.1 / 0.01	0.1	18	Fe 0.09 Pb 0.01[d] Al 0.26 PO_4 0.25	115[f]	29	63	0	37		
6/6 0945		70	8.3	92	219	7.5	1.52[c]		16 / 0.70		0.0 / 0.00	98 / 1.61		13 / 0.37			0.2			133[e]	32	76	0	250		
7/11 1015		68	8.0	87	184	7.5	1.30[c]		12 / 0.52		0.0 / 0.00	67 / 1.10		9.5 / 0.27			0.1			112[e]	29	65	10	75		
8/1 1350		72	8.4	95	186	7.5	1.30[c]		13 / 0.57		0.0 / 0.00	88 / 1.44		9.4 / 0.27			0.0			113[e]	30	65	0	50		
9/5 0950		68	7.6	83	217	7.3	15 / 0.75	8.6 / 0.71	19 / 0.83	1.3 / 0.03	0.0 / 0.00	106 / 1.74	11 / 0.23	11 / 0.31	1.0 / 0.02	0.0 / 0.00	0.0	20	Fe 0.01 PO_4 0.25[d] Al 0.13	139[f]	36	73	0	40		
10/3 1145		66	8.3	88	221	7.3	1.56[c]		16 / 0.70		0.0 / 0.00	104 / 1.70		11 / 0.31			0.1			135[e]	31	78	0	55		
11/7 1050		58	7.9	77	196	7.3	1.37[c]		17 / 0.74		0.0 / 0.00	95 / 1.56		8.5 / 0.24			0.1			119[e]	35	68	0	25		
12/12 1035		46	10.0	83	201	7.3	1.36[c]		15 / 0.65		0.0 / 0.00	86 / 1.41		14 / 0.39			0.1			122[e]	32	68	0	55		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

LITTLE POTATO SLOUGH AT TERMINOUS (STA. 99)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Tidal																									USGS
1/11 1100		44	9.7	79	330	7.2	2.86[c]		24 / 1.04		0.0 / 0.00	92 / 1.51		48 / 1.35			0.1			198[e]	27	143	68	20	Maximum >7,000 Minimum 0.64 Median 130	
2/2 1240		52	9.0	81	338	7.2	2.28[c]		20 / 0.87		0.0 / 0.00	82 / 1.34		50 / 1.41			0.0			203[e]	28	114	47	70		
3/1 1225		50	9.8	86	281	7.3	2.64[c]		3.3 / 0.14		0.0 / 0.00	88 / 1.44		39 / 1.10			0.1			169[e]	5	132	60	35		
4/11 1320		62	8.8	89	103	7.1	0.86[c]		4.7 / 0.20		0.0 / 0.00	48 / 0.79		5.8 / 0.16			0.1			62[e]	19	43	4	25		
5/2 1015		60	8.8	88	193	7.3	15 / 0.75	6.4 / 0.53	13 / 0.57	1.3 / 0.03	0.0 / 0.00	68 / 1.11	10 / 0.21	21 / 0.59	0.7 / 0.01	0.1 / 0.01	0.1	19	Fe 0.07 Al 0.04[d] PO_4 0.20 Cu 0.01	120[f]	30	64	8	15		
6/6 1100		71	7.6	85	193	7.3	1.40[c]		13 / 0.57		0.0 / 0.00	78 / 1.28		17 / 0.48			0.1			116[e]	29	70	6	70		
7/11 1100		71	7.5	84	215	7.3	1.43[c]		15 / 0.65		0.0 / 0.00	85 / 1.39		21 / 0.59			0.1			129[e]	31	71	1	35		
8/1 1520		74	7.3	85	240	7.3	1.53[c]		18 / 0.78		0.0 / 0.00	88 / 1.44		26 / 0.73			0.0			144[e]	34	76	4	20		
9/5 1045		69	6.5	71	293	7.1	20 / 1.00	11 / 0.90	30 / 1.30	1.9 / 0.05	0.0 / 0.00	112 / 1.84	16 / 0.33	36 / 1.02	0.7 / 0.01	0.1 / 0.01	0.0	21	Fe 0.07 PO_4 0.25[d] Al 0.11 Zn 0.20	192[f]	40	95	3	15		
10/3 1250		69	7.7	85	229	7.3	1.54[c]		16 / 0.70		0.0 / 0.00	93 / 1.52		19 / 0.54			0.0			137[e]	31	77	1	50		
11/7 1200		58	7.3	71	218	7.3	1.44[c]		19 / 0.83		0.0 / 0.00	85 / 1.39		31 / 0.87			0.0			131[e]	37	72	2	15		
12/12 1200		48	9.1	78	210	7.1	1.38[c]		14 / 0.61		0.0 / 0.00	66 / 1.08		26 / 0.73			0.0			126[e]	31	69	15	40		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

McCLOUD RIVER ABOVE SHASTA LAKE (STA. 18)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/4 1250	970	41	13.1	102	96.3	7.4	0.76[c]		4.7 / 0.20		0.0 / 0.00	50 / 0.82		2.0 / 0.06			0.0			86[e]	21	38	0	1	Median 1.3	
2/10 0925	4,450	44	11.7	95	71.5	7.1	0.64[c]		2.0 / 0.04		0.0 / 0.00	36 / 0.59		1.2 / 0.03			0.1			64[e]	12	32	2	30	Maximum 230.	
3/7 1100	6,300	47	11.1	94	67.1	7.3	0.60[c]		2.0 / 0.09		0.0 / 0.00	34 / 0.56		2.0 / 0.06			0.0			60[e]	13	30	2	60	Minimum 0.06	
4/11 1115	1,960	53	10.9	100	96.6	7.3	0.84[c]		3.2 / 0.14		1 / 0.03	57 / 0.93		0.7 / 0.02			0.0		Tot. Alk. 59	86[e]	14	42	0	2		
5/2 1240	1,600	53	11.0	101	93.1	7.5	10 / 0.50	4.1 / 0.34	3.6 / 0.16	1.1 / 0.03	0.0 / 0.00	58 / 0.95	3.0 / 0.06	1.5 / 0.04	0.2 / 0.00	0.1 / 0.01	0.1	31	Fe 0.02 Pb 0.01[d] Al 0.01 As 0.01 PO_4 0.10	84[f]	16	42	0	3		
6/6 1350	1,610	61	9.4	95	97.6	7.5	0.80[c]		4.0 / 0.17		0.0 / 0.00	57 / 0.93		2.2 / 0.06			0.0			87[e]	18	40	0	4		
7/5 0620	1,130	56	9.9	94	97.4	7.3	0.84[c]		4.1 / 0.18		0.0 / 0.00	62 / 1.02		0.0 / 0.00			0.0			87[e]	18	42	0	4		
8/9 0750	998	54	10.1	93	96.9	7.3	0.90[c]		5.2 / 0.23		0.0 / 0.00	58 / 0.95		0.0 / 0.00			0.0			86[e]	20	45	0	25		
9/7 1345	958	55	10.5	98	94.2	7.7	9.2 / 0.46	2.7 / 0.22	6.0 / 0.26	1.4 / 0.04	0.0 / 0.00	54 / 0.89	1.0 / 0.02	1.8 / 0.05	0.2 / 0.00	0.0 / 0.00	0.0	36	Al 0.07 Cu 0.01[d] PO_4 0.10	85[f]	27	34	0	5		
10/11 0715	946	49	10.6	92	97.0	7.3	0.75[c]		5.0 / 0.22		0.0 / 0.00	58 / 0.95		1.0 / 0.03			0.0			87[e]	23	38	0	4		
11/8 0730	946	48	11.2	96	97.7	7.3	0.74[c]		4.9 / 0.21		0.0 / 0.00	58 / 0.95		0.5 / 0.01			0.0			87[e]	22	37	0	2		
12/13 0920	1,210	43	12.0	96	101	7.3	0.84[c]		4.8 / 0.21		0.0 / 0.00	60 / 0.98		2.0 / 0.06			0.1			90[e]	20	42	0	25		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

MERCED RIVER BELOW EXCHEQUER DAM (STA. 32a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/4 1445	49	48	11.2	96	142	7.4	1.24[c]		4.3 / 0.19		0.0 / 0.00	68 / 1.11		4.5 / 0.13			0.0			93[e]	13	62	6	20		
2/2 1100	39	54	10.3	96	157	7.3	1.44[c]		5.1 / 0.22		0.0 / 0.00	74 / 1.21		14 / 0.39			0.0			104[e]	13	72	11	20		
3/1 1655	124	47	11.7	100	85.6	7.2	0.80[c]		2.4 / 0.10		0.0 / 0.00	40 / 0.66		3.0 / 0.08			0.0			56[e]	11	40	7	30		
4/4 1430	978	49	9.0	78	106	7.0	1.04[c]		3.0 / 0.13		0.0 / 0.00	49 / 0.80		4.2 / 0.12			0.1			69[e]	11	52	12	10		
5/2 1650	606	51	10.5	94	30.6	7.0	4.4 / 0.22	0.2 / 0.02	1.2 / 0.05	0.4 / 0.01	0.0 / 0.00	13 / 0.21	2.0 / 0.04	1.5 / 0.04	0.1 / 0.00	0.2 / 0.01	0.0	8.8	Fe 0.02, PO_4 0.05, Al 0.12[d]	25[f]	17	12	1	10		
6/1 1455	1650	55	9.0	84	40.3	7.1	0.32[c]		1.9 / 0.08		0.0 / 0.00	18 / 0.30		2.8 / 0.08			0.0			26[e]	20	16	1	1		
7/5 1545	1900	62	9.8	100	29.4	7.0	0.22[c]		0.9 / 0.04		0.0 / 0.00	14 / 0.23		3.0 / 0.08			0.0			19[e]	15	11	0	3		
8/8 1335	1860	77	7.5	89	55.5	7.1	0.42[c]		2.3 / 0.10		0.0 / 0.00	25 / 0.41		2.5 / 0.07			0.0			36[e]	19	21	0	10		
9/6 1155	123	78	8.2	99	114	7.3	9.8 / 0.49	7.2 / 0.59	3.8 / 0.17	1.1 / 0.03	0.0 / 0.00	67 / 1.10	4.8 / 0.10	3.4 / 0.10	1.4 / 0.02	0.1 / 0.01	0.0	11	Fe 0.05, As 0.01, PO_4 0.05[d]	76[f]	13	54	0	20		
10/4 1030	35	70	7.9	88	185	7.3	1.60[c]		4.1 / 0.18		0.0 / 0.00	92 / 1.51		5.6 / 0.16			0.1			121[e]	10	80	5	40	Median 18	
11/2 1050	37	60	8.7	87	198	7.3	1.78[c]		5.7 / 0.25		0.0 / 0.00	100 / 1.64		7.8 / 0.22			0.0			129[e]	12	89	7	25	Max. 620	
12/13 1540	42	47	12.3	104	114	7.3	0.96[c]		4.0 / 0.17		0.0 / 0.00	52 / 0.85		3.2 / 0.09			0.0			75[e]	15	48	5	16	Min. 0.23	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

MERCED RIVER NEAR STEVINSON (STA. 32)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/7 1030	140	48	11.2	96	301	7.4	1.76[c]		30 / 1.30		0.0 / 0.00	134 / 2.20		18 / 0.51			0.0			193[e]	42	88	0	20		
2/5 1330	163	56	9.6	91	278	7.3	1.68[c]		26 / 1.13		0.0 / 0.00	128 / 2.10		15 / 0.42			0.0			179[e]	40	84	0	35		
3/14 1500	124	62	10.4	106	308	7.9	1.84[c]		32 / 1.39		0.0 / 0.00	136 / 2.23		24 / 0.68			0.0			198[e]	43	92	0	10		
4/14 1145	114	67	9.3	100	287	7.6	1.66[c]		28 / 1.22		0.0 / 0.00	128 / 2.10		20 / 0.56			0.0			184[e]	42	83	0	15		
5/5 1040	131	66	9.1	97	258	7.3	19 / 0.95	6.0 / 0.49	28 / 1.22	3.7 / 0.09	0.0 / 0.00	117 / 1.92	13 / 0.27	16 / 0.45	4.6 / 0.07	0.2 / 0.01	0.0	27	Fe 0.09 PO_4 1.85 Al 0.65 Cu 0.01 [d]	176[f]	44	72	0	10		
6/9 1140	125	77	8.8	105	222	7.3	1.34[c]		22 / 0.96		0.0 / 0.00	104 / 1.70		19 / 0.54			0.0			143[e]	42	67	0	3		
7/14 0910	60	74	7.6	88	317	7.3	1.72[c]		31 / 1.35		0.0 / 0.00	146 / 2.39		28 / 0.79			0.1			204[e]	44	86	0	8		
8/4 1255	92	80	8.7	107	244	7.7	1.50[c]		25 / 1.09		0.0 / 0.00	118 / 1.93		14 / 0.39			0.0			157[e]	42	75	0	25		
9/8 0730	82	69	7.1	78	321	7.3	22 / 1.10	6.6 / 0.54	41 / 1.78	1.9 / 0.05	0.0 / 0.00	148 / 2.43	13 / 0.27	22 / 0.62	1.5 / 0.02	0.2 / 0.01	0.0	35	Fe 0.02 Al 0.02 PO_4 0.20 [d]	216[f]	51	82	0	4		
10/6 0755	59	79	7.6	84	367	7.5	1.90[c]		36 / 1.57		0.0 / 0.00	155 / 2.54		27 / 0.76			0.0			236[e]	45	95	0	25	Median 62	
11/10 1155	97	59	9.5	94	325	7.5	1.82[c]		37 / 1.61		0.0 / 0.00	145 / 2.38		22 / 0.62			0.1			209[e]	47	91	0	3	Max. 2300	
12/15 1035	122	52	10.0	91	309	7.5	1.90[c]		30 / 1.30		0.0 / 0.00	146 / 2.39		16 / 0.45			0.0			199[e]	41	95	0	8	Min. 6.2	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

MILL CREEK NEAR MOUTH (STA. 88)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH [a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform [h] MPN/ml	Analyzed by [i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/11 1530	159	45	12.0	99	220	7.3	1.20/c		21/0.91		0.0/0.00	61/1.00		27/0.76			0.8			163[e]	43	60	10	7	Median 23.	
2/1 1400	2,140	50	10.3	91	99.6	7.3	0.72/c		5.4/0.23		0.0/0.00	28/0.46		7.0/0.20			0.1			74[e]	24	36	13	200	Maximum 620.	
3/7 1040	1,850	50	10.5	93	84.2	7.2	0.62/c		5.0/0.22		0.0/0.00	36/0.59		4.5/0.13			0.1			63[e]	26	31	1	175	Minimum 2.3	
4/11 1115	189	55	10.3	97	116	7.3	0.72/c		8.4/0.37		0.0/0.00	38/0.62		9.8/0.28			0.3			86[e]	34	36	5	15		
5/10 0955	232	58	10.1	98	115	7.3	8.0/0.40	4.9/0.40	8.5/0.37	2.0/0.05	0.0/0.00	38/0.62	15/0.31	10/0.28	0.6/0.01	0.2/0.01	0.3	29	Al 0.18 Fe 0.04 [d] Zn 0.01 PO_4 0.10	98[f]	30	40	9	25		
6/13 0935	165	62	8.8	90	118	7.3	0.82/c		7.3/0.32		0.0/0.00	34/0.56		5.0/0.14			0.3			88[e]	28	41	13	35		
7/12 0725	17	69	7.7	85	186	7.1	1.14/c		17/0.74		0.0/0.00	62/1.02		22/0.62			0.4			138[e]	39	57	6	1		
8/3 0910	2 est.	75	7.8	91	224	7.1	1.48/c		15/0.65		0.0/0.00	87/1.43		15/0.42			0.5			166[e]	31	74	3	1		
9/13 0830	1.6	69	7.9	87	251	7.3	19/0.95	13/1.03	16/0.70	3.5/0.09	0.0/0.00	94/1.54	25/0.52	26/0.73	0.3/0.00	0.1/0.01	0.6	42	Al 0.06 PO_4 0.10 [d]	192[f]	25	99	22	2		
10/11 1400	11	61	10.6	106	229	7.5	1.24/c		20/0.87		0.0/0.00	63/1.03		26/0.73			0.6			170[e]	41	62	10	8		
11/2 1105	8.7	56	11.5	109	215	7.5	1.21/c		18/0.78		0.0/0.00	67/1.10		22/0.62			0.6			160[e]	39	60	5	3		
12/6 1045	102	42	12.5	99	174	7.3	1.04/c		14/0.61		0.0/0.00	60/0.98		16/0.45			0.5			129[e]	37	52	3	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

MOKELUMNE RIVER BELOW COSUMNES RIVER (STA. 23b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										
1/12 1050		47			88				3.5					7.8						88	17					USBR
4/11 1330		61			68				3.0					7.8						68	19					
5/12 1145		70			76				3.2					8.5						76	24					
6/15 1230		75			56				2.3					2.8						56	17					
7/13 1015		74			344				39					62						344	45					
8/17 1215		78			180				16					11						180	29					
9/15 1240		72			84				12					11						84	34					
10/11 1345		70			96				6.9					11						96	26					
11/14 1355		55			44				2.3					0.7						44	20					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

MOKELUMNE RIVER BELOW GEORGIANA SLOUGH (STA. 23c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[g]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										
1/12 1015		44			208				12					11						164	25					USBR
4/11 1410		61			106				4.6					7.8						104	19					
5/12 1230		66			172				9.7					11						132	25					
6/15 1200		75			179				11					13						132	27					
7/13 1050		71			306				35					59						280	50					
8/17 1340		77			188				14					11						176	32					
9/15 1200		71			253				20					13						196	34					
10/11 1150		65			253				22					15						180	38					
11/14 1430		55			169				11					7.1						144	28					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

MOKELUMNE RIVER AT LANCHA PLANA (STA. 23a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in ppm / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/4 1010	N. R.	45	11.3	93	40.0	7.1	—/0.36[c]		2.2/0.10		0.0/0.00	16/0.26		2.0/0.06			0.0			32[e]	22	18	5	10	Maximum 230 Minimum 0.06 Median 2.1	
2/1 1115	67	49	10.9	95	52.6	6.9	—/0.36[c]		3.2/0.14		0.0/0.00	13/0.21		2.8/0.08			0.1			42[e]	28	18	7	15		
3/1 0930	84	47	11.5	98	54.3	6.8	—/0.44[c]		2.1/0.09		0.0/0.00	20/0.33		4.5/0.13			0.0			43[e]	17	22	6	15		
4/4 0925	270	49	11.2	98	54.0	7.1	—/0.48[c]		2.0/0.09		0.0/0.00	21/0.34		3.5/0.10			0.1			43[e]	16	24	7	8		
5/2 0905	293	51	11.3	101	48.6	7.0	4.8/0.24	2.2/0.18	2.1/0.09	0.7/0.02	0.0/0.00	22/0.36	3.0/0.06	3.5/0.10	0.2/0.00	0.1/0.01	0.1	12	Fe 0.08 Pb 0.01[d] Al 0.09 Zn 0.04 PO_4 0.20 As 0.01 Cu 0.01	40[f]	17	21	3	3		
6/1 0930	749	51	10.7	96	48.0	6.9	—/0.33[c]		2.2/0.10		0.0/0.00	20/0.33		2.6/0.07			0.0			38[e]	23	17	1	11		
7/5 0930	162	53	11.0	100	47.4	7.1	—/0.36[c]		1.9/0.08		0.0/0.00	21/0.34		3.8/0.11			0.1			38[e]	18	18	1	2		
8/8 0845	160	56	10.2	97	45.6	6.9	—/0.33[c]		2.5/0.11		0.0/0.00	21/0.34		2.8/0.08			0.0			36[e]	25	16	0	10		
9/5 1130	725	59	10.0	98	39.4	7.3	4.4/0.22	0.7/0.06	2.6/0.11	0.5/0.01	0.0/0.00	20/0.33	1.0/0.02	1.8/0.05	0.0/0.00	0.0/0.00	0.0	10	Al 0.06 Cu 0.01[d] PO_4 0.00	31[f]	28	14	0	6		
10/3 0900	102	58	9.7	94	40.7	6.8	—/0.34[c]		1.7/0.07		0.0/0.00	17/0.28		2.5/0.07			0.0			32[e]	17	17	3	10		
11/1 0915	129	60	9.9	99	36.6	6.9	—/0.26[c]		2.0/0.09		0.0/0.00	15/0.25		2.5/0.07			0.0			29[e]	26	13	1	1		
12/13 0925	155	51	11.1	99	38.9	6.8	—/0.30[c]		2.0/0.09		0.0/0.00	14/0.23		1.8/0.05			0.0			31[e]	23	15	4	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

MOKELUMNE RIVER AT WOODBRIDGE (STA. 23)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/14 0945	54	44	11.2	91	54.8	6.9	0.40[c]		3.2 / 0.14		0.0 / 0.00	20 / 0.33		4.0 / 0.11			0.0			42[e]	26	20	4	1	Maximum >7,000 Minimum 2.1 Median 62.	
2/5 0850	112	50	10.7	94	61.6	7.1	0.44[c]		2.9 / 0.13		0.0 / 0.00	20 / 0.33		4.0 / 0.11			0.0			47[e]	20	22	6	35		
3/4 0830	123	52	10.5	95	60.3	7.1	0.50[c]		2.7 / 0.12		0.0 / 0.00	22 / 0.36		4.0 / 0.11			0.0			46[e]	19	25	7	10		
4/6 1510	18 est.	69	8.7	96	65.1	7.1	0.56[c]		2.6 / 0.11		0.0 / 0.00	27 / 0.44		4.0 / 0.11			0.2			50[e]	16	28	6	10		
5/3 0920	24	63	8.8	91	63.6	7.1	4.8 / 0.24	3.4 / 0.28	2.6 / 0.11	0.7 / 0.02	0.0 / 0.00	27 / 0.44	5.0 / 0.10	3.8 / 0.11	0.1 / 0.00	0.1 / 0.01	0.0	14	Fe 0.22 Al 0.05[d] PO_4 0.05 Zn 0.01 Pb 0.01	48[f]	17	26	4	3		
6/2 1020	184	69	8.5	94	50.2	7.1	0.37[c]		2.2 / 0.10		0.0 / 0.00	21 / 0.34		2.8 / 0.08			0.0			38[e]	21	18	1	11		
7/8 0640	26	68	8.1	88	53.1	7.1	0.42[c]		2.2 / 0.10		0.0 / 0.00	24 / 0.39		3.2 / 0.09			0.0			41[e]	19	21	1	2		
8/10 1430	25	73	8.7	100	50.6	7.1	0.36[c]		2.8 / 0.12		0.0 / 0.00	22 / 0.36		2.5 / 0.07			0.0			39[e]	25	18	0	10		
9/9 0720	29	68	7.6	83	52.4	7.1	5.2 / 0.26	1.5 / 0.12	2.6 / 0.11	0.7 / 0.02	0.0 / 0.00	24 / 0.39	0.0 / 0.00	2.5 / 0.07	0.0 / 0.00	0.1 / 0.01	0.1	13	Fe 0.14 Al 0.08[d] PO_4 0.05	38[f]	22	19	0	8		
10/6 1300	26	67	8.7	94	52.0	6.9	0.42[c]		2.0 / 0.09		0.0 / 0.00	23 / 0.38		2.8 / 0.08			0.1			40[e]	18	21	2	10		
11/4 1100	16	59	9.6	94	46.0	7.1	0.34[c]		2.2 / 0.10		0.0 / 0.00	19 / 0.31		2.8 / 0.08			0.0			35[e]	23	17	1	2		
12/15 1625	177	49	11.4	99	43.3	7.0	0.34[c]		2.7 / 0.12		0.0 / 0.00	16 / 0.26		1.8 / 0.05			0.0			33[e]	26	17	4	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

OLD RIVER AT MANDEVILLE ISLAND (STA. 112)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960	Tidal																									USGS
1/8 0930		44	11.0	90	452	7.2	2.51[c]		41/1.78		0.0/0.00	104/1.70		60/1.69			0.2			262[e]	41	126	41	25	Maximum 1,300 Minimum 2.3 Median 62	
2/16 1145		52	9.1	82	616	7.3	3.32[c]		54/2.35		0.0/0.00	92/1.51		90/2.54			0.0			357[e]	41	166	91	60		
3/15 1240		55	10.2	96	343	7.3	2.04[c]		29/1.26		0.0/0.00	78/1.28		42/1.18			0.1			199[e]	38	102	38	60		
4/15 0915		60	9.2	91	140	7.3	0.98[c]		8.2/0.36		0.0/0.00	57/0.93		11/0.31			0.0			81[e]	27	49	2	40		
5/6 0920		63	9.4	97	145	7.3	11/0.55	6.0/0.49	9.1/0.40	1.3/0.03	0.0/0.00	61/1.00	9.0/0.19	11/0.31	0.3/0.00	0.1/0.01	0.1	16	Fe 0.06 Cu 0.01[d] Al 0.13 PO_4 0.10	94[f]	27	52	2	27		
6/10 0650		69	7.9	87	184	7.4	1.56[c]		13/0.57		0.0/0.00	78/1.28		12/0.34			0.2			107[e]	27	78	14	85		
7/14 1425		72	7.7	87	426	7.4	1.70[c]		47/2.04		0.0/0.00	81/1.33		83/2.34			0.2			247[e]	55	85	19	20		
8/5 0905		75	8.0	94	640	7.5	2.08[c]		82/3.57		0.0/0.00	73/1.20		136/3.84			0.0			371[e]	63	104	44	40		
9/5 1445		75	7.9	92	810	7.5	19/0.95	18/1.51	102/4.44	4.4/0.11	0.0/0.00	86/1.41	35/0.73	181/5.10	0.8/0.01	0.1/0.01	0.2	19	Fe 0.03 PO_4 0.25[d] Al 0.12	422[f]	63	123	52	10		
10/3 1335		68	8.6	94	427	7.3	1.94[c]		43/1.87		0.0/0.00	101/1.66		66/1.86			0.1			248[e]	49	97	14	20		
11/1 1340		63	8.4	87	302	7.3	1.65[c]		33/1.44		0.0/0.00	96/1.57		39/1.10			0.0			175[e]	47	82	3	3		
12/16 0915		48	10.0	86	405	7.3	2.76[c]		38/1.65		0.0/0.00	141/2.31		61/1.72			0.1			235[e]	37	138	22	13		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

OLD RIVER AT ORWOOD BRIDGE (STA. 108)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Tidal																									USGS
1/11 1730		45	9.2	76	951	7.3	5.04[c]		99 / 4.31		0.0 / 0.00	109 / 1.79		150 / 4.23			0.4			535[e]	46	252	163	16	Maximum >7,000 Minimum 0.62 Median 62.	
2/3 0820		51	8.2	73	1,080	7.1	5.40[c]		105 / 4.57		0.0 / 0.00	114 / 1.87		170 / 4.79			0.5			607[e]	46	270	177	40		
3/1 1530		53	10.6	97	871	7.4	4.28[c]		97 / 4.22		0.0 / 0.00	118 / 1.93		158 / 4.46			0.6			490[e]	50	214	117	15		
4/12 0835		63	8.8	91	206	7.3	1.28[c]		15 / 0.65		0.0 / 0.00	66 / 1.08		22 / 0.62			0.1			116[e]	34	64	10	20		
5/3 0800		62	7.9	81	171	7.1	13 / 0.65	5.7 / 0.47	11 / 0.48	1.5 / 0.02	0.0 / 0.00	60 / 0.98	13 / 0.27	14 / 0.39	0.6 / 0.01	0.2 / 0.01	0.1	16	Fe 0.08 Al 0.21 [d] PO_4 0.15	105[f]	29	56	7	27		
6/7 0700		71	7.1	80	204	7.3	1.44[c]		16 / 0.70		0.0 / 0.00	78 / 1.28		17 / 0.48			0.2			114[e]	33	72	8	140		
7/12 0800		72	6.6	75	376	7.3	1.62[c]		40 / 1.74		0.0 / 0.00	90 / 1.48		64 / 1.80			0.0			212[e]	52	81	7	40		
8/2 0900		77	6.7	80	507	7.3	1.92[c]		59 / 2.57		0.0 / 0.00	85 / 1.39		96 / 2.71			0.1			284[e]	57	96	26	35		
9/5 1255		73	7.1	81	728	7.3	21 / 1.05	14 / 1.15	109 / 4.74	3.8 / 0.10	0.0 / 0.00	91 / 1.49	38 / 0.79	164 / 4.62	0.8 / 0.01	0.1 / 0.01	0.0	15	Fe 0.12 Zn 0.01 [d] Al 0.15 PO_4 0.15	411[f]	67	110	35	37		
10/4 0820		69	7.3	80	476	7.3	2.00[c]		51 / 2.22		0.0 / 0.00	102 / 1.67		80 / 2.26			0.2			267[e]	53	100	16	50		
11/8 0915		59	7.8	77	433	7.3	2.19[c]		48 / 2.09		0.0 / 0.00	103 / 1.69		63 / 1.78			0.2			243[e]	49	109	25	15		
12/12 1455		50	10.4	92	840	7.6	3.92[c]		101 / 4.39		0.0 / 0.00	149 / 2.44		155 / 4.37			0.3			472[e]	53	196	74	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

OLD RIVER NEAR TRACY (STA. 103)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Tidal																									USGS
1/7 1520		44	8.0	65	914	7.4	4.22[c]		100 / 4.35		0.0 / 0.00	172 / 2.82		160 / 4.51			0.4			514[e]	51	211	70	15	Maximum 7,000 Minimum 0.62 Median 62.	
2/15 1730		54	7.9	73	647	7.3	2.84[c]		70 / 3.04		0.0 / 0.00	120 / 1.97		96 / 2.71			0.2			364[e]	52	142	44	60		
3/15 1105		58	14.0	136	1,110	8.1	5.02[c]		122 / 5.31		0.0 / 0.00	164 / 2.69		199 / 5.61			0.6			624[e]	51	251	117	15		
4/15 0800		61	10.6	106	1,220	8.1	5.88[c]		132 / 5.74		0.0 / 0.00	197 / 3.23		228 / 6.43			0.4			685[e]	49	294	132	10		
5/6 0825		64	10.2	106	851	8.1	44 / 2.20	23 / 1.88	99 / 4.31	6.2 / 0.16	0.0 / 0.00	170 / 2.79	67 / 1.39	148 / 4.17	1.4 / 0.02	0.1 / 0.01	0.5	16	Fe 0.03 Al 0.12[d] PO_4 0.45	489[f]	50	204	65	55		
6/10 0540		71	6.8	76	1,080	7.7	5.00[c]		119 / 5.18		0.0 / 0.00	190 / 3.11		220 / 6.20			0.5			607[e]	51	250	94	90		
7/15 0745		72	6.3	72	846	7.9	4.00[c]		88 / 3.83		0.0 / 0.00	173 / 2.84		158 / 4.46			0.6			475[e]	49	200	58	20		
8/5 0640		74	6.1	71	835	7.7	4.20[c]		87 / 3.78		0.0 / 0.00	141 / 2.31		134 / 3.78			0.3			469[e]	47	210	94	15		
9/8 1040		74	7.4	85	991	7.9	48 / 2.40	24 / 2.00	122 / 5.31	7.4 / 0.19	0.0 / 0.00	185 / 3.03	71 / 1.48	182 / 5.13	0.3 / 0.00	0.2 / 0.01	0.4	5.2	Fe 0.05 PO_4 0.50[d] Al 0.15 Zn 0.17	552[f]	54	220	68	15		
10/6 1735		72	8.9	101	1,290	7.9	5.48[c]		141 / 6.13		0.0 / 0.00	192 / 3.15		252 / 7.11			0.4			725[e]	49	274	117	20		
11/11 0915		57	8.0	77	870	7.5	4.14[c]		102 / 4.44		0.0 / 0.00	147 / 2.41		152 / 4.29			0.3			489[e]	52	207	86	15		
12/16 0810		48	5.1	44	893	7.3	4.20[c]		102 / 4.44		0.0 / 0.00	153 / 2.51		155 / 4.37			0.0			501[e]	51	210	85	15		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

PAYNES CREEK NEAR RED BLUFF (STA. 88g)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/14 0930	80 est.	43	10.0	80	234	7.3	1.58[c]		20 / 0.87		0.0 / 0.00	117 / 1.92		16 / 0.45			0.5			181[e]	36	79	0	6		
2/24 1310	30 est.	52	10.4	94	170	7.4	1.42[c]		14 / 0.61		0.0 / 0.00	90 / 1.48		13 / 0.37			0.3			131[e]	30	71	0	30		
3/7 1200	800 est.	57	9.3	89	94.8	7.3	0.72[c]		4.5 / 0.20		0.0 / 0.00	42 / 0.69		5.6 / 0.16			0.1			73[e]	22	36	2	70		
4/11 1230	15 est.	64	10.5	110	199	7.5	1.48[c]		16 / 0.70		0.0 / 0.00	105 / 1.72		11 / 0.31			0.4			154[e]	32	74	0	3		
5/10 1200	30 est.	66	9.6	102	172	7.4	12 / 0.60	10 / 0.84	13 / 0.57	1.7 / 0.04	0.0 / 0.00	98 / 1.61	5.0 / 0.10	9.5 / 0.27	0.6 / 0.01	0.1 / 0.01	0.3	47	Al 0.12 Fe 0.02 [d] PO_4 0.15	147[f]	28	72	0	25		
6/13 1120	16 est.	72	9.3	106	222	7.3	1.64[c]		17 / 0.74		0.0 / 0.00	120 / 1.97		12 / 0.34			0.2			172[e]	31	82	0	5		
7/12 0930	25 est.	65	9.2	97	247	7.3	1.78[c]		18 / 0.78		0.0 / 0.00	136 / 2.23		11 / 0.31			0.5			191[e]	30	89	0	1		
8/2 1525	14 est.	75	9.5	111	248	7.5	1.70[c]		21 / 0.91		0.0 / 0.00	132 / 2.16		17 / 0.48			0.5			192[e]	35	85	0	10		
9/12 1415	10 est.	74	8.9	102	255	7.5	17 / 0.85	9.8 / 0.81	23 / 1.00	2.2 / 0.06	0.0 / 0.00	134 / 2.20	2.0 / 0.04	20 / 0.56	0.4 / 0.01	0.1 / 0.01	0.5	51	Fe 0.02 Al 0.08 [d] PO_4 0.25 Cu 0.01	192[f]	37	83	0	8		
10/11 1000	20 est.	60	10.0	100	252	7.3	1.68[c]		21 / 0.91		0.0 / 0.00	122 / 2.00		20 / 0.56			0.4			195[e]	35	84	0	1		
11/2 0850	18 est.	58	9.8	95	252	7.3	1.64[c]		21 / 0.91		0.0 / 0.00	124 / 2.03		16 / 0.45			0.5			195[e]	36	82	0	4		
12/6 0910	40 est.	44	11.8	96	162	7.3	1.20[c]		12 / 0.52		0.0 / 0.00	86 / 1.41		7.8 / 0.22			0.0			125[e]	30	60	0	7		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

PIT RIVER NEAR BIEBER (STA. 17e)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/6 1415	64	32	11.8	81	297	7.3	1.78[c]		30/1.30		0.0/0.00	159/2.61		8.8/0.25			0.2			205[e]	42	89	0	48		
2/10 1520	3,580	36	9.9	72	104	7.1	0.70[c]		8.3/0.36		0.0/0.00	42/0.69		2.2/0.06			0.1			72[e]	34	35	1	500		
3/	Not Sampled -- Inaccessible																									
4/13 1135	302	57	9.8	95	204	7.9	1.40[c]		15/0.65		4/0.13	105/1.72		5.8/0.16			0.0		Tot. Alk. 113	141[e]	32	70	0	30		
5/11 0820	364	64	7.0	73	275	7.5	20/1.00	8.9/0.73	26/1.13	6.2/0.16	0.0/0.00	161/2.64	11/0.23	5.6/0.16	0.5/0.01	0.4/0.02	0.2	30	Fe 0.12 PO_4 0.40[d] Al 0.04	188[f]	37	86	0	16		
6/8 1155	34	73	10.4	119	314	8.1	2.02[c]		32/1.39		10/0.33	171/2.80		10/0.28			0.1		Tot. Alk. 191	217[e]	41	101	0	2		
7/7 0745	15	70	6.2	69	362	7.9	3.54[c]		11/0.48		0.0/0.00	218/3.57		6.0/0.17			0.2			250[e]	12	177	0	5		
8/11 0750	0.7	62	6.4	65	277	8.1	1.18[c]		44/1.91		39/1.30	78/1.28		7.5/0.21			0.2		Tot. Alk. 157	191[e]	62	59	0	6		
9/8 0930	0.6	60	10.7	107	323	8.1	15/0.75	3.3/0.27	59/2.57	6.5/0.17	47/1.57	84/1.38	12/0.25	14/0.39	0.7/0.01	0.4/0.02	0.1	16	Fe 0.03 PO_4 0.05[d] Al 0.40 Tot. Alk. 179	215[f]	68	51	0	6		
10/13 0805	29	42	8.3	66	352	7.7	2.38[c]		28/1.22		0.0/0.00	196/3.21		8.0/0.23			0.3			243[e]	34	119	0	10		
11/10 0740	49	41	9.4	73	301	7.7	1.82[c]		36/1.57		0.0/0.00	158/2.59		7.8/0.22			0.2			208[e]	46	91	0	15		
12/15 0915	105	33	11.1	77	231	7.3	1.43[c]		22/0.96		0.0/0.00	128/2.10		5.5/0.16			0.1			160[e]	40	72	0	60		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

PIT RIVER NEAR CANBY (STA. 17a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/6 1530	42.4	34	11.2	79	285	7.3	1.68/[c]		32/1.39		0.0/0.00	148/2.43		9.5/0.27			0.1			199[e]	45	84	0	12	Median 23.	
2/10 1855	1,450	37	9.9	73	124	7.2	0.88/[c]		14/0.61		0.0/0.00	66/1.08		4.0/0.11			0.2			87[e]	42	44	0	350	Maximum 2,400.	
3/11 0730	528	41	9.7	76	199	7.3	1.28/[c]		19/0.83		0.0/0.00	90/1.48		6.5/0.18			0.1			140[e]	39	64	0	600	Minimum 0.045 -	
4/13 1415	164	59	9.0	89	195	7.7	1.24/[c]		15/0.65		0.0/0.00	105/1.72		5.4/0.15			0.1			137[e]	34	62	0	25		
5/11 1055	222	65	7.5	79	220	7.7	17/0.85	6.8/0.56	19/0.83	5.2/0.13	0.0/0.00	125/2.05	10/0.21	4.6/0.13	0.5/0.01	0.4/0.02	0.2	32	Fe 0.17 Al 0.41[d] PO_4 0.35	158[f]	35	71	0	48		
6/8 1415	65	75	8.1	95	270	7.9	1.68/[c]		26/1.13		0.0/0.00	162/2.66		9.0/0.25			0.1			189[e]	40	84	0	15		
7/7 1000	17	73	6.7	77	284	7.9	1.82/[c]		25/1.09		0.0/0.00	158/2.59		7.0/0.20			0.1			199[e]	37	91	0	25		
8/11 0915	33	69	7.7	85	270	7.7	1.74/[c]		22/0.96		0.0/0.00	143/2.34		5.0/0.14			0.2			189e	36	87	0	110		
9/8 1150	19	65	8.4	89	256	7.9	20/1.00	11/0.91	22/0.96	4.7/0.12	0.0/0.00	152/2.49	11/0.23	6.0/0.17	0.0/0.00	0.3/0.02	0.3	28	Al 0.26 Zn 0.01[d] PO_4 0.40	178[f]	32	96	0	50		
10/13 1010	36	45	9.7	80	337	7.7	1.94/[c]		34/1.48		0.0/0.00	169/2.77		9.0/0.25			0.3			236[e]	43	97	0	20		
11/10 0925	69	41	10.3	80	272	7.5	1.46/[c]		36/1.57		0.0/0.00	134/2.20		7.5/0.21			0.1			190	52	73	0	60		
12/15 1005	36	33	12.1	84	326	7.7	1.84/[c]		36/1.57		0.0/0.00	166/2.72		12/0.34			0.2			228	46	92	0	40		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

PIT RIVER NEAR MONTGOMERY CREEK (STA. 17)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/6 1100	3,130	41	15.3	120	163	7.5	—/1.20[c]		12/0.52		0.0/0.00	93/1.52		4.8/0.14			0.1			122[e]	30	60	0	1	Median 1.3	
2/10 1200	11,700	42	11.3	90	127	7.3	—/1.00[c]		6.8/0.30		0.0/0.00	66/1.08		3.2/0.09			0.1			95[e]	23	50	0	70	Maximum 230.	
3/9 1545	9,980	48	11.4	98	142	7.4	—/1.04[c]		8.2/0.36		0.0/0.00	76/1.25		4.0/0.11			0.1			106[e]	26	57	0	50	Minimum 0.06	
4/13 0845	2,100	54	10.5	97	137	7.5	—/1.04[c]		7.7/0.33		0.0/0.00	77/1.26		3.6/0.10			0.0			103[e]	24	52	0	0.8		
5/10 0820	1,780	57	10.0	96	143	7.5	12/0.60	5.5/0.45	8.5/0.37	1.9/0.05	0.0/0.00	83/1.36	3.0/0.06	3.3/0.09	0.0/0.00	0.1/0.01	0.1	30	Fe 0.01 Zn 0.07[d] Al 0.09 PO_4 0.20	106[f]	25	53	0	5		
6/8 0855	4,340	65	8.9	94	149	7.5	—/1.12[c]		9.9/0.43		0.0/0.00	89/1.46		8.5/0.24			0.1			112[e]	28	56	0	1		
7/6 1345	4,090	71	9.0	101	154	8.1	—/1.16[c]		9.6/0.42		0.0/0.00	93/1.52		2.2/0.06			0.0			115[e]	27	58	0	3		
8/10 1320	4,060	69	9.1	100	152	8.1	—/1.10[c]		11/0.48		0.0/0.00	90/1.48		3.0/0.08			0.1			114[e]	30	55	0	6		
9/8 0645	1,250	62	9.1	93	151	7.9	11/0.55	6.2/0.51	13/0.57	2.0/0.05	0.0/0.00	91/1.49	3.0/0.06	4.5/0.13	0.0/0.00	0.1/0.01	0.1	29	Fe 0.01 PO_4 0.10[d]	114[f]	34	53	0	5		
10/12 1330	3,520	57	10.1	97	148	7.7	—/1.12[c]		10/0.44		0.0/0.00	87/1.43		2.5/0.07			0.1			111[e]	28	56	0	10		
11/9 1350	3,100	51	11.1	99	156	7.7	—/1.14[c]		9.3/0.40		0.0/0.00	90/1.48		2.8/0.08			0.0			117[e]	26	57	0	2		
12/14 1430	4,210	44	12.2	99	156	7.5	—/1.14[c]		11/0.48		0.0/0.00	90/1.48		5.5/0.16			0.1			117[e]	30	57	0	18		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

PIT RIVER, SOUTH FORK NEAR LIKELY (STA. 18a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/7 0810	24	32	12.0	82	96.5	7.3	0.74[c]		4.8 / 0.21		0.0 / 0.00	52 / 0.85		1.5 / 0.04			0.1			83[e]	22	37	0	6	Median 21.	
2/11 0800	24	32	11.7	80	127	7.3	1.04[c]		6.0 / 0.26		0.0 / 0.00	60 / 0.98		0.8 / 0.02			0.1			110[e]	19	52	3	40	Maximum 7,000.	
3/11 0955	11	37	11.3	83	127	7.3	0.96[c]		6.7 / 0.29		0.0 / 0.00	64 / 1.05		2.0 / 0.06			0.1			110[e]	23	48	0	35	Minimum 0.045 -	
4/13 1710	47	57	8.6	83	88.3	7.7	0.75[c]		3.9 / 0.17		0.0 / 0.00	51 / 0.84		1.9 / 0.05			0.0			76[e]	18	37	0	5		
5/11 1645	105	59	8.3	82	82.8	7.7	8.5 / 0.42	2.2 / 0.18	3.6 / 0.16	1.9 / 0.05	0.0 / 0.00	46 / 0.75	1.0 / 0.02	1.0 / 0.03	0.6 / 0.01	0.2 / 0.01	0.1	30	Fe 0.07 Zn 0.01[d] Al 0.20 PO_4 0.10	72[f]	20	30	0	15		
6/8 1625	146	63	7.9	82	99.8	7.7	0.76[c]		4.5 / 0.20		0.0 / 0.00	58 / 0.95		3.0 / 0.08			0.0			86[e]	21	38	0	5		
7/7 1210	50	69	8.0	88	122	8.1	0.94[c]		6.4 / 0.28		0.0 / 0.00	74 / 1.21		0.5 / 0.01			0.0			105[e]	23	47	0	25		
8/11 1100	159	71	7.8	88	149	8.1	1.12[c]		9.5 / 0.41		0.0 / 0.00	86 / 1.41		1.0 / 0.03			0.1			129[e]	27	56	0	40		
9/8 1320	71	67	8.1	87	150	8.1	13 / 0.65	5.2 / 0.43	12 / 0.52	4.5 / 0.12	0.0 / 0.00	88 / 1.44	7.0 / 0.15	2.2 / 0.06	1.6 / 0.03	0.0 / 0.00	0.0	36	Fe 0.06 Al 0.28[d] PO_4 0.05	125[f]	30	54	0	60		
10/13 1155	59	50	9.8	86	145	7.7	1.06[c]		10 / 0.44		0.0 / 0.00	79 / 1.29		0.0 / 0.00			0.1			125[e]	29	53	0	60		
11/10 1135	25	41	10.9	85	104	7.5	0.82[c]		5.4 / 0.23		0.0 / 0.00	63 / 1.03		0.8 / 0.02			0.0			90[e]	22	41	0	2		
12/15 1140	5	36	11.8	86	102	7.5	0.88[c]		6.2 / 0.27		0.0 / 0.00	64 / 1.05		2.7 / 0.08			0.0			88[e]	23	44	0	25		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

PUTAH CREEK NEAR WINTERS (STA. 81)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/15 0830	9.6	43	11.3	91	364	7.5	3.32[c]		14 / 0.61		0.0 / 0.00	197 / 3.23		14 / 0.39			0.3			219[e]	16	166	4	3	Maximum 62	
2/4 1225	11	49	11.4	99	416	7.7	3.58[c]		25 / 1.09		0.0 / 0.00	184 / 3.02		34 / 0.96			0.4			250[e]	23	179	28	10	Minimum 0.5	
3/11 1150	75	52	14.1	128	334	8.1	3.28[c]		10 / 0.44		0.0 / 0.00	192 / 3.15		7.5 / 0.21			0.2			201[e]	12	164	7	1	Median 6.2	
4/15 1040	118	52	12.8	115	323	7.9	3.06[c]		8.2 / 0.36		0.0 / 0.00	188 / 3.08		7.5 / 0.21			0.1			194[e]	11	153	0	20		
5/11 0900	163	55	11.0	104	313	6.8	19 / 0.95	27 / 2.18	7.7 / 0.33	2.1 / 0.05	0.0 / 0.00	188 / 3.08	17 / 0.35	5.0 / 0.14	0.4 / 0.01	0.1 / 0.01	0.1	17	Al 0.06 Cu 0.01[d] PO_4 0.05 Zn 0.02	188[f]	9	156	2	20		
6/15 1315	296	59	12.1	119	303	8.1	2.94[c]		2.5 / 0.33		7 / 0.23	172 / 2.82		4.0 / 0.11			0.2		Tot. Alk. 186	182[e]	10	147	0	2		
7/14 1200	329	59	11.8	116	306	8.1	2.98[c]		8.2 / 0.36		0.0 / 0.00	184 / 3.02		9.0 / 0.25			0.2			184[e]	11	149	0	2		
8/5 0920	344	51	10.3	92	307	7.7	3.02[c]		8.5 / 0.37		5 / 0.17	173 / 2.84		5.0 / 0.14			0.2		Tot. Alk. 183	184[e]	11	151	1	2		
9/15 1150	148	56	12.0	114	305	7.9	20 / 1.00	25 / 2.06	8.5 / 0.37	1.7 / 0.04	0.0 / 0.00	186 / 3.05	9.0 / 0.19	7.0 / 0.20	1.0 / 0.02	0.2 / 0.01	0.1	20	Fe 0.02 Cu 0.01[d] Al 0.09 PO_4 0.05	185[f]	11	153	0	2		
10/13 1420	75	57	12.7	122	311	8.1	3.00[c]		7.4 / 0.32		5 / 0.17	164 / 2.69		7.5 / 0.21			0.1		Tot. Alk. 174	187[e]	10	150	7	1		
11/4 1250	32	57	11.6	112	313	7.9	3.20[c]		9.2 / 0.40		0.0 / 0.00	177 / 2.90		5.2 / 0.15			0.2			188[e]	11	160	15	2		
12/8 1240	9.8	46	13.4	112	333	8.1	3.14[c]		11 / 0.48		4 / 0.13	180 / 2.95		7.0 / 0.20			0.2		Tot. Alk. 188	201[e]	13	157	3	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

REDBANK CREEK AT FOOTHILLS (STA. 88d)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12	Ponded -- Not Sampled																									
2/2 1300	66	49	10.7	95	316	7.7	32 / 1.60	15 / 1.23	11 / 0.48	0.9 / 0.02	0.0 / 0.00	131 / 2.15	40 / 0.83	6.0 / 0.17	3.3 / 0.05	0.4 / 0.02	0.0	15		189[f]	14	141	34			
3/8 1135	32	55	12.2	117	421	8.1	45 / 2.25	23 / 1.87	13 / 0.57	0.7 / 0.02	0.0 / 0.00	210 / 3.44	50 / 1.04	8.0 / 0.23	0.2 / 0.00	0.1 / 0.01	0.1	23		266[f]	12	206	34			
4/12 1135	11	67	9.7	104	518	7.9	56 / 2.79	28 / 2.33	18 / 0.78	1.7 / 0.04	10 / 0.33	248 / 4.06	59 / 1.23	14 / 0.39	0.8 / 0.01	0.2 / 0.01	0.1	18	Tot. Alk. 268	328[f]	13	256	36			
5/2 0950	10	62	9.3	95	514	7.9	56 / 2.79	29 / 2.37	17 / 0.74	1.2 / 0.03	0.0 / 0.00	267 / 4.38	60 / 1.25	14 / 0.39	0.4 / 0.01	0.0 / 0.00	0.1	18	Fe 0.04 Cu 0.02[d] PO_4 0.15 Zn 0.02 Al 0.21	328[f]	12	258	39	2		
6/14	Ponded -- Not Sampled																									
7/11	Dry -- Not Sampled																									
8/2	Dry -- Not Sampled																									
9/12	Dry -- Not Sampled																									
10/11	Dry -- Not Sampled																									
11/1	Dry -- Not Sampled																									
12/5 1510	9.0	50	10.4	92	517	7.9	50 / 2.50	25 / 2.06	17 / 0.74	0.8 / 0.02	0.0 / 0.00	184 / 3.02	63 / 1.31	30 / 0.85	4.9 / 0.08	0.0 / 0.00	0.0	15		297[f]	14	228	77			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

ROCK SLOUGH NEAR KNIGHTSEN (ST[A], 109)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960	Tidal																									USGS
1/11 1530		46	9.6	80	822	7.3	4.24[c]		88 / 3.83		0.0 / 0.00	114 / 1.87		128 / 3.61			0.3			472[e]	47	212	119	18	Maximum 2,400 Minimum 0.62 Median 50.	
2/3 0845		50	8.5	75	988	7.3	4.96[c]		97 / 4.22		0.0 / 0.00	124 / 2.03		145 / 4.09			0.3			567[e]	46	248	146	50		
3/1 1425		53	11.9	109	931	7.9	4.46[c]		104 / 4.52		0.0 / 0.00	127 / 2.08		162 / 4.57			0.7			535[e]	50	223	119	30		
4/11 1510		65	8.2	87	244	7.3	1.42[c]		20 / 0.87		0.0 / 0.00	74 / 1.21		27 / 0.76			0.1			140[e]	38	71	10	25		
5/2 1210		65	8.6	91	203	7.3	14 / 0.70	6.6 / 0.54	16 / 0.70	1.5 / 0.04	0.0 / 0.00	68 / 1.11	17 / 0.35	18 / 0.51	0.5 / 0.01	0.2 / 0.01	0.1	16	Fe 0.05 Cu 0.01[d] Al 0.20 PO_4 0.10	123[f]	35	62	6	27		
6/6 1325		73	7.1	82	213	7.3	1.40[c]		16 / 0.70		0.0 / 0.00	82 / 1.34		17 / 0.48			0.2			123[e]	33	70	3	125		
7/11 1240		76	7.2	85	402	7.3	1.76[c]		44 / 1.91		0.0 / 0.00	86 / 1.41		73 / 2.06			0.5			231[e]	52	88	17	35		
8/1 1820		77	6.0	71	615	7.3	2.28[c]		81 / 3.52		0.0 / 0.00	88 / 1.44		124 / 3.50			0.0			354[e]	61	114	42	35		
9/5 1230		74	9.9	115	822	7.3	21 / 1.05	18 / 1.49	129 / 5.61	4.4 / 0.11	0.0 / 0.00	116 / 1.90	39 / 0.81	193 / 5.44	0.8 / 0.01	0.1 / 0.01	0.1	15	Fe 0.09 Zn 0.01[d] Al 0.17 PO_4 0.15	477[f]	68	127	32	27		
10/3 1605		70	7.4	82	506	7.3	2.24[c]		57 / 2.48		0.0 / 0.00	99 / 1.62		89 / 2.51			0.1			290[e]	53	112	31	30		
11/7 1340		60	7.8	78	400	7.3	2.07[c]		43 / 1.87		0.0 / 0.00	101 / 1.66		54 / 1.52			0.0			230[e]	47	104	21	15		
12/12 1410		49	9.2	80	689	7.3	3.36[c]		73 / 3.18		0.0 / 0.00	137 / 2.25		116 / 3.27			0.3			396[e]	49	168	56	15		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT BEND (STA. 12c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 0815	6,100	45	11.2	92	155	7.3	1.08[c]		9.6 / 0.42		0.0 / 0.00	63 / 1.03		11 / 0.31			0.1			119[e]	28	54	2	25	Median 230.	
2/2 1150	22,000	48	10.6	91	117	7.2	1.10[c]		5.4 / 0.23		0.0 / 0.00	50 / 0.82		13 / 0.37			0.0			90[e]	17	55	14	70	Maximum 24,000.	
3/7 1300	18,700	52	10.3	94	103	7.3	0.88[c]		4.5 / 0.20		0.0 / 0.00	46 / 0.75		3.5 / 0.10			0.0			78[e]	19	44	6	350	Minimum 6.2	
4/11 1345	4,660	57	10.7	103	136	7.5	1.08[c]		6.0 / 0.26		0.0 / 0.00	68 / 1.11		5.0 / 0.14			0.0			105[e]	19	54	0	15		
5/10 1410	8,790	56	10.9	104	125	7.3	11 / 0.55	5.5 / 0.45	6.2 / 0.27	1.2 / 0.03	0.0 / 0.00	60 / 0.98	11 / 0.23	4.0 / 0.11	0.3 / 0.00	0.1 / 0.01	0.0	24	Fe 0.08 Al 0.25[d] PO_4 0.05 Cu 0.01	93[f]	21	50	1	15		
6/13 1200	9,520	50	10.4	92	122	7.3	0.94[c]		6.4 / 0.28		0.0 / 0.00	68 / 1.11		4.2 / 0.12			0.0			94[e]	23	47	0	3		
7/12 1030	11,000	54	10.7	99	118	7.3	1.06[c]		5.6 / 0.24		0.0 / 0.00	67 / 1.10		2.5 / 0.07			0.0			91[e]	18	53	0	8		
8/3 0745	10,400	53	10.1	92	116	7.3	0.90[c]		6.5 / 0.28		0.0 / 0.00	64 / 1.05		2.8 / 0.08			0.0			89[e]	24	43	0	2		
9/13 0700	6,750	57	9.7	93	110	7.3	9.6 / 0.48	5.8 / 0.48	7.6 / 0.33	1.1 / 0.03	0.0 / 0.00	68 / 1.11	5.0 / 0.10	2.5 / 0.07	0.0 / 0.00	0.0 / 0.00	0.1	28	Fe 0.03 Al 0.08[d] PO_4 0.10	93[f]	25	48	0	8		
10/11 1050	6,440	56	10.1	96	121	7.3	9.6 / 0.48	5.4 / 0.44	6.7 / 0.29		0.0 / 0.00	66 / 1.08		2.5 / 0.07			0.0			93[e]	24	46	0	1		
11/2 0735	6,030	57	9.8	94	128	7.3	1.00[c]		7.1 / 0.31		0.0 / 0.00	68 / 1.11		6.2 / 0.17			0.0			98[e]	24	50	0	2		
12/6 0830	5,990	47	10.5	89	148	7.1	1.42[c]		7.9 / 0.34		0.0 / 0.00	108 / 1.77		5.0 / 0.14			0.1			114[e]	19	71	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT BEND (STA. 12c)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/1-27					144	7.6	12 / 0.60	6.8 / 0.56	8.3 / 0.36	1.9 / 0.05	0.0 / 0.00	70 / 1.15	8.0 / 0.17	8.5 / 0.24	1.2 / 0.02	0.1 / 0.01	0.1	33	Fe 0.04	114[f] 102[g]	23	58	1			
1/28					113	6.7	10 / 0.5	6.6 / 0.54	6.1 / 0.27	1.4 / 0.04	0.0 / 0.00	47 / 0.77	13 / 0.27	6.5 / 0.18	1.9 / 0.03		0.0	25		94[f]	20	26	0			
1/29-31					140	7.4	12 / 0.60	5.1 / 0.42	8.2 / 0.36	1.9 / 0.05	0.0 / 0.00	60 / 0.98	15 / 0.31	5.2 / 0.15	1.4 / 0.02	0.0 / 0.00	0.0	28	Fe 0.07	107[f] 126[g]	25	51	2			
2/1-7					121	7.2	10 / 0.50	4.6 / 0.38	6.1 / 0.27	1.8 / 0.05	0.0 / 0.00	50 / 0.82	14 / 0.29	4.0 / 0.11	1.4 / 0.02	0.2 / 0.01	0.1	24	Fe 0.10 Zn 0.05 Cu 0.02[d]	92[f] 107[g]	22	44	3			
2/8					91.9	7.2	/ 0.76[c]		3.5 / 0.15	1.9 / 0.05	0.0 / 0.00	40 / 0.66	10 / 0.21	2.0 / 0.06	2.6 / 0.04		0.0	23	Fe 1.5	122[g]	16	38	5			
2/9-29					134	7.9	11 / 0.55	5.5 / 0.45	6.7 / 0.29	2.2 / 0.06	0.0 / 0.00	62 / 1.02	9.0 / 0.19	4.2 / 0.12	1.6 / 0.03	0.2 / 0.01	0.0	28	Fe 0.10 Zn 0.04 Cu 0.03[d]	100[f] 121[g]	21	50	0			
3/1-5					136	7.1	13 / 0.65	5.7 / 0.47	7.4 / 0.32	1.6 / 0.04	0.0 / 0.00	67 / 1.10	9.0 / 0.19	4.2 / 0.12	0.9 / 0.01	0.1 / 0.01		25	Fe 0.07	100[f] 128[g]	22	56	1			
3/6-9					104	7.0	8.4 / 0.42	5.4 / 0.44	4.9 / 0.21	1.3 / 0.03	0.0 / 0.00	48 / 0.79	9.0 / 0.19	2.5 / 0.07	0.9 / 0.01	0.0 / 0.00	0.0	21	Fe 0.15 Zn 0.09 Cu 0.01[d]	78[f] 91[g]	19	43	4			
3/10-31					139	7.8	12 / 0.60	7.3 / 0.60	7.1 / 0.31	1.4 / 0.04	0.0 / 0.00	71 / 1.16	11 / 0.23	4.0 / 0.11	0.8 / 0.01	0.0 / 0.00	0.1	25	Fe 0.05	104[f] 101[g]	20	60	2			
4/1-10					135	7.7	12 / 0.60	6.3 / 0.52	7.1 / 0.31	1.7 / 0.04	0.0 / 0.00	74 / 1.21	7.0 / 0.15	5.5 / 0.16	0.3 / 0.00	0.1 / 0.01	0.1	27	Fe 0.04 Zn 0.12 Cu 0.01[d]	103[f] 96[g]	21	56	0			
4/11-20					133	7.7	11 / 0.55	6.7 / 0.55	7.1 / 0.31	1.6 / 0.04	0.0 / 0.00	72 / 1.18	9.0 / 0.19	3.5 / 0.10	0.2 / 0.00	0.1 / 0.01	0.1	29	Fe 0.04 Zn 0.12 Cu 0.01[d]	103[f] 99[g]	21	55	0			
4/21-30					129	7.9	11 / 0.55	5.2 / 0.43	6.8 / 0.30	1.6 / 0.04	0.0 / 0.00	71 / 1.16	2.0 / 0.04	4.5 / 0.13	0.5 / 0.01	0.1 / 0.01	0.0	28	Fe 0.08 Zn 0.03 Cu 0.01[d]	95[f] 93[g]	23	49	0			
5/1-10					133	8.0	10 / 0.50	6.3 / 0.52	6.6 / 0.29	1.4 / 0.04	0.0 / 0.00	69 / 1.13	7.8 / 0.16	2.5 / 0.07	0.5 / 0.01	0.0 / 0.00	0.0	27	Cu 0.01 Zn 0.16 Fe 0.04[d]	96[f] 112[g]	21	51	0			
5/11-20					128	8.0	11 / 0.55	5.1 / 0.42	6.5 / 0.28	1.6 / 0.04	0.0 / 0.00	68 / 1.11	4.8 / 0.10	3.4 / 0.10	0.6 / 0.01	0.0 / 0.00	0.0	26	Fe 0.01 Zn 0.04 Cu 0.01[d]	92[f] 104[g]	22	48	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT BEND (STA. 12c) (cont.)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
5/21-31					126	8.0	10 / 0.50	5.6 / 0.46	6.2 / 0.27	1.3 / 0.03	0.0 / 0.00	65 / 1.07	7.4 / 0.15	2.0 / 0.06	0.8 / 0.01	0.0 / 0.00	0.0	26	Fe 0.09 Cu 0.02[d] Zn 0.11	91[f] 111[g]	21	48	0			
6/1-3, 6/5-9					127	7.3	10 / 0.50	5.1 / 0.42	7.3 / 0.32	1.1 / 0.03	0.0 / 0.00	68 / 1.11	8.0 / 0.17	1.5 / 0.04	0.0 / 0.00	0.0 / 0.00	0.0	28	Fe 0.04 Cu 0.01[d] Zn 0.10	94[f] 108[g]	25	46	0			
6/10-17					127	7.5	11 / 0.55	5.2 / 0.43	7.7 / 0.33	1.2 / 0.03	0.0 / 0.00	69 / 1.13	8.0 / 0.17	1.0 / 0.03	0.0 / 0.00	0.0 / 0.00	0.0	29	Fe 0.05 Cu 0.01[d] Zn 0.08	97[f] 105[g]	25	49	0			
6/18-30					125	7.5	11 / 0.55	6.0 / 0.49	7.7 / 0.33	1.2 / 0.03	0.0 / 0.00	70 / 1.15	7.0 / 0.15	3.0 / 0.08	0.2 / 0.00	0.0 / 0.00	0.0	29	Fe 0.04 Cu 0.01[d] Zn 0.09	99[f] 93[g]	24	52	0			
7/1-10					123	7.4	11 / 0.55	4.9 / 0.40	7.1 / 0.31	1.4 / 0.04	0.0 / 0.00	63 / 1.03	6.0 / 0.12	3.2 / 0.09	0.8 / 0.01	0.1 / 0.01	0.0	28	Fe 0.00 Cu 0.00[d] Zn 0.13	94[f] 102[g]	24	48	0			
7/11-20					122	7.8	11 / 0.55	4.5 / 0.37	7.3 / 0.32	1.1 / 0.03	0.0 / 0.00	63 / 1.03	6.4 / 0.13	2.8 / 0.08	0.7 / 0.01	0.1 / 0.01	0.1	25	Fe 0.00 Cu 0.00[d] Zn 0.16	90[f] 102[g]	25	46	0			
7/21-31					120	7.8	12 / 0.60	3.6 / 0.30	7.1 / 0.31	1.2 / 0.03	0.0 / 0.00	63 / 1.03	4.0 / 0.08	2.5 / 0.07	0.6 / 0.01	0.1 / 0.01	0.0	27	Fe 0.00 Cu 0.00[d] Zn 0.14	89[f] 105[g]	25	45	0			
8/1-10					116	7.9	12 / 0.60	3.9 / 0.32	6.0 / 0.26	1.2 / 0.03	0.0 / 0.00	64 / 1.05	5.0 / 0.10	3.2 / 0.09	0.9 / 0.01	0.1 / 0.01	0.0	21	Cu 0.01 Fe 0.00[d] Zn 0.06	85[f] 85[g]	21	46	0			
8/11-20					116	8.1	12 / 0.60	4.1 / 0.34	6.0 / 0.26	0.8 / 0.02	0.0 / 0.00	64 / 1.05	5.0 / 0.10	3.0 / 0.08	1.3 / 0.02	0.1 / 0.01	0.0	25	Cu 0.01 Fe 0.00[d] Zn 0.08	89[f] 89[g]	21	47	0			
8/21-31					118	7.9	12 / 0.60	4.4 / 0.36	5.8 / 0.25	1.1 / 0.03	0.0 / 0.00	64 / 1.05	5.0 / 0.10	3.5 / 0.10	1.2 / 0.02	0.1 / 0.01	0.0	25	Cu 0.01 Fe 0.00[d] Zn 0.07	90[f] 92[g]	20	48	0			
9/1-10					121	7.4	9.8 / 0.49	5.4 / 0.44	6.0 / 0.26	0.9 / 0.02	0.0 / 0.00	62 / 1.02	5.6 / 0.12	3.1 / 0.09	0.0 / 0.00	0.1 / 0.01	0.1	26	Cu 0.02 Fe 0.00[d] Zn 0.06	88[f] 92[g]	21	46	0			
9/11-20					122	7.4	8.7 / 0.43	6.3 / 0.52	6.3 / 0.27	0.9 / 0.02	0.0 / 0.00	64 / 1.05	6.6 / 0.14	2.8 / 0.08	0.2 / 0.00	0.1 / 0.01	0.1	27	Cu 0.03 Fe 0.01[d] Zn 0.15	91[f] 90[g]	22	47	0			
9/21-30					122	7.5	9.3 / 0.46	5.0 / 0.41	6.9 / 0.30	0.9 / 0.02	0.0 / 0.00	66 / 1.08	4.2 / 0.09	2.0 / 0.06	0.0 / 0.00	0.0 / 0.00	0.1	25	Cu 0.01 Fe 0.00[d] Zn 0.06	86[f] 89[g]	25	44	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

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ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT BEND (STA. 12c) (cont.)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
10/1-10					122	7.3	11 / 0.55	5.2 / 0.43	6.7 / 0.29	1.1 / 0.03	0.0 / 0.00	66 / 1.08	5.0 / 0.10	5.0 / 0.14	0.8 / 0.01	0.0 / 0.00	0.0	26	Fe 0.00	94[f] 103[g]	22	49	0			
10/11-20					122	7.1	11 / 0.55	5.0 / 0.41	6.7 / 0.29	1.3 / 0.03	0.0 / 0.00	68 / 1.11	4.0 / 0.08	4.2 / 0.12	0.6 / 0.01	0.1 / 0.01	0.0	27	Fe 0.00	93[f] 99[g]	23	48	0			
10/21-31					123	7.3	11 / 0.55	5.0 / 0.41	7.2 / 0.31	1.2 / 0.03	0.0 / 0.00	66 / 1.08	5.0 / 0.10	2.2 / 0.06	1.0 / 0.02	0.1 / 0.01	0.0	27	Fe 0.00	93[f] 97[g]	24	48	0			
11/1-10					129	7.4	12 / 0.60	5.4 / 0.44	6.7 / 0.29	1.4 / 0.04	0.0 / 0.00	69 / 1.13	5.0 / 0.10	3.8 / 0.11	1.0 / 0.02	0.0 / 0.00	0.1	28	Cu 0.02 Fe 0.00[d] Zn 0.09	97[f] 101[g]	21	52	0			
11/11-20					136	7.6	12 / 0.60	6.3 / 0.52	7.1 / 0.31	1.4 / 0.04	0.0 / 0.00	71 / 1.16	5.0 / 0.10	4.8 / 0.14	1.0 / 0.02	0.0 / 0.00	0.0	26	Cu 0.02 Fe 0.01[d] Zn 0.10	99[f] 109[g]	21	56	0			
11/21-30					135	7.3	12 / 0.60	5.8 / 0.48	7.4 / 0.32	1.4 / 0.04	0.0 / 0.00	67 / 1.10	7.0 / 0.15	5.0 / 0.14	0.7 / 0.01	0.0 / 0.00	0.1	26	Cu 0.02 Fe 0.02[d] Zn 0.10	98[f] 114[g]	22	54	0			
12/1					67.4	6.1	/ 0.56[e]		2.4 / 0.10	1.9 / 0.05	0.0 / 0.00	34 / 0.56	4.0 / 0.08	1.5 / 0.04	2.1 / 0.03		0.2	14	Fe 0.82	51[f]	14	28	0			
12/2-15					143	7.4	13 / 0.65	5.0 / 0.41	7.4 / 0.32	2.0 / 0.05	0.0 / 0.00	64 / 1.05	10 / 0.21	3.7 / 0.10	0.6 / 0.01	0.1 / 0.01	0.0	29	Cu 0.02 Zn 0.13[d] Fe 0.14	103[f] 111[g]	22	53	1			
12/16-21					127	6.9	11 / 0.55	5.2 / 0.43	6.7 / 0.29	1.4 / 0.04	0.0 / 0.00	59 / 0.97	10 / 0.21	3.0 / 0.08	1.1 / 0.02	0.1 / 0.01	0.0	24	Cu 0.03 Zn 0.11[d] Fe 0.12	92[f] 98[g]	22	49	1			
12/22-31					139	7.7	13 / 0.65	4.7 / 0.39	7.2 / 0.31	1.8 / 0.05	0.0 / 0.00	65 / 1.07	8.0 / 0.17	4.0 / 0.11	0.6 / 0.01	0.0 / 0.00	0.0	28	Cu 0.04 Zn 0.08[d] Fe 0.08	99[f] 106[g]	22	52	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT BOYERS PUMPS (STA. 14c)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
6/1-8					159	7.6	13/0.65	6.9/0.57	9.1/0.40	1.2/0.03	0.0/0.00	83/1.36	10/0.21	4.0/0.11	0.0/0.00	0.0/0.00	0.1	29	Fe 0.01	114[f] 132[g]	24	61	0			
6/9-21					144	7.5	12/0.60	6.1/0.50	8.5/0.37	1.2/0.03	0.0/0.00	76/1.25	8.0/0.17	3.5/0.10	0.0/0.00	0.0/0.00	0.0	29	Fe 0.02	105[f] 117[g]	25	55	0			
6/22-30					136	7.8	12/0.60	6.1/0.50	8.2/0.36	1.1/0.03	0.0/0.00	74/1.21	8.0/0.17	3.0/0.08	0.0/0.00	0.1/0.01	0.0	28	Fe 0.03	103[f] 99[g]	24	55	0			
7/1-10					138	7.6	11/0.55	6.4/0.53	9.5/0.41	1.3/0.03	0.0/0.00	77/1.26	6.0/0.12	4.2/0.12	0.4/0.01	0.1/0.01	0.0	31	Fe 0.03	108[f] 117[g]	27	54	0			
7/11-20					136	7.4	12/0.60	5.6/0.46	9.1/0.40	1.3/0.03	0.0/0.00	76/1.25	6.0/0.12	3.8/0.11	0.4/0.01	0.0/0.00	0.0	32	Fe 0.03	107[f] 107[g]	27	53	0			
7/21-30					132	7.6	12/0.60	5.6/0.46	8.9/0.39	1.3/0.03	0.0/0.00	76/1.25	6.0/0.12	3.5/0.10	0.4/0.01	0.0/0.00	0.0	31	Fe 0.03	106[f] 119[g]	26	53	0			
8/1-9					133	7.8	11/0.55	5.2/0.43	7.1/0.31	1.2/0.03	0.0/0.00	70/1.15	6.0/0.12	2.8/0.08	0.3/0.00	0.0/0.00	0.0	29	Fe 0.00	97[f] 101[g]	23	49	0			
8/10-17					134	8.0	11/0.55	6.0/0.49	7.1/0.31	1.2/0.03	0.0/0.00	72/1.18	6.0/0.12	3.2/0.09	0.3/0.00	0.0/0.00	0.0	34	Fe 0.00	104[f] 109[g]	22	52	0			
8/18-27					132	7.9	11/0.55	5.7/0.47	7.1/0.31	1.2/0.03	0.0/0.00	70/1.15	5.0/0.10	3.0/0.08	0.3/0.00	0.0/0.00	0.0	27	Fe 0.00	94[f] 99[g]	23	51	0			
8/28-31					140	8.1	11/0.55	7.2/0.59	7.4/0.32	1.2/0.03	0.0/0.00	74/1.21	6.0/0.12	3.5/0.10	0.4/0.01	0.0/0.00	0.0	29	Fe 0.00	102[f] 104[g]	21	57	0			
9/1-10					146	7.9	13/0.65	6.4/0.53	7.9/0.34	1.2/0.03	0.0/0.00	78/1.28	5.0/0.10	4.2/0.12	1.0/0.02	0.1/0.01	0.0	28	Fe 0.00	105[f] 109[g]	22	59	0			
9/11-20					149	8.1	14/0.70	5.6/0.46	7.9/0.34	1.4/0.04	0.0/0.00	82/1.34	6.0/0.12	4.0/0.11	0.9/0.01	0.1/0.01	0.0	27	Fe 0.00	107[f] 110[g]	22	58	0			
9/21-30					142	7.9	14/0.70	5.6/0.46	7.5/0.33	1.1/0.03	0.0/0.00	78/1.28	6.0/0.12	4.2/0.12	1.1/0.02	0.1/0.01	0.0	27	Fe 0.00	105[f] 107[g]	22	58	0			
10/1-10					152	7.4	13/0.65	6.2/0.51	9.7/0.42	1.2/0.03	0.0/0.00	85/1.39	5.0/0.10	3.8/0.11	1.2/0.02	0.0/0.00	0.1	34	Fe 0.00	116[f] 125[g]	26	58	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT BOYERS PUMPS (STA. 14c) (cont.)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
10/11-20					149	7.4	13 / 0.65	6.2 / 0.51	9.7 / 0.42	1.3 / 0.03	0.0 / 0.00	80 / 1.31	6.0 / 0.12	4.0 / 0.11	0.7 / 0.01	0.0 / 0.00	0.1	33	Fe 0.00	113[f] 124[g]	26	58	0			
10/21-31					147	7.4	13 / 0.65	6.0 / 0.49	8.9 / 0.39	1.3 / 0.03	0.0 / 0.00	80 / 1.31	6.0 / 0.12	3.8 / 0.11	0.7 / 0.01	0.0 / 0.00	0.1	29	Fe 0.00	108[f] 114[g]	25	57	0			
11/1-8					147	7.7	14 / 0.70	5.4 / 0.44	9.4 / 0.41	1.7 / 0.04	0.0 / 0.00	82 / 1.34	5.0 / 0.10	3.2 / 0.09	0.5 / 0.01	0.0 / 0.00	0.1	29	Fe 0.00	108[f] 112[g]	26	57	0			
11/9-17					145	7.5	12 / 0.60	6.3 / 0.52	8.1 / 0.35	1.7 / 0.04	0.0 / 0.00	76 / 1.25	7.0 / 0.15	4.2 / 0.12	0.6 / 0.01	0.1 / 0.01	0.1	29	Fe 0.01	106[f] 115[g]	23	56	0			
11/18-26					166	7.6	14 / 0.70	6.8 / 0.56	10 / 0.44	2.3 / 0.06	0.0 / 0.00	86 / 1.41	6.0 / 0.12	5.8 / 0.16	1.2 / 0.02	0.2 / 0.01	0.1	30	Fe 0.01	118[f] 119[g]	25	63	0			
11/27-29					110	7.6	9.6 / 0.48	4.4 / 0.36	6.2 / 0.27	1.5 / 0.04	0.0 / 0.00	48 / 0.79	6.0 / 0.12	3.5 / 0.10	2.6 / 0.04	0.3 / 0.02	0.1	23	Fe 0.09	81[f] 104[g]	23	42	3			
11/30-31					153	7.2	12 / 0.60	6.3 / 0.52	9.1 / 0.40	1.4 / 0.04	0.0 / 0.00	68 / 1.11	9.0 / 0.19	9.0 / 0.25	1.6 / 0.03	0.1 / 0.01	0.1	27	Fe 0.03	109[f] 110[g]	26	56	0			
12/2-5					95.4	7.0	8.0 / 0.40	3.9 / 0.32	5.1 / 0.22	1.4 / 0.04	0.0 / 0.00	40 / 0.66	6.0 / 0.12	6.0 / 0.17	2.5 / 0.04	0.1 / 0.01	0.1	21	Fe 0.15	74[f] 73[g]	22	36	3			
12/6-17					171	8.2	14 / 0.70	7.5 / 0.62	9.3 / 0.40	1.5 / 0.04	0.0 / 0.00	80 / 1.31	10 / 0.21	7.5 / 0.21	2.0 / 0.03	0.1 / 0.01	0.0	31	Fe 0.04	122[f] 116[g]	23	66	0			
12/18-21					129	7.2	11 / 0.55	5.0 / 0.41	7.2 / 0.31	1.1 / 0.03	0.0 / 0.00	52 / 0.85	9.0 / 0.19	8.5 / 0.24	2.0 / 0.03	0.1 / 0.01	0.0	22	Fe 0.09	92[f] 99[g]	24	48	5			
12/22-31					169	8.1	14 / 0.70	7.1 / 0.58	9.0 / 0.39	1.2 / 0.03	0.0 / 0.00	78 / 1.28	9.0 / 0.19	7.5 / 0.21	1.9 / 0.03	0.1 / 0.01	0.0	27	Fe 0.03	115[f] 117[g]	23	64	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE 8

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT BUTTE CITY (STA. 87a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																									Median 23.	USGS
1/13 0925	6,180	45	11.5	94	157	7.3	1.16/c		10/0.44		0.0/0.00	82/1.34		6.5/0.18			0.2			112[e]	28	58	0	15		
2/3 1015	25,900	49	10.4	91	111	7.2	0.84/c		5.1/0.22		0.0/0.00	44/0.72		5.8/0.16			0.2			79[e]	21	42	6	500	Maximum 620.	
3/9 1300	25,100	53	10.2	94	111	7.3	0.88/c		4.6/0.20		0.0/0.00	58/0.95		3.5/0.10			0.1			79[e]	19	44	0	300	Minimum 2.3	
4/13 1120	3,900	61	9.7	97	166	7.5	1.28/c		8.0/0.35		0.0/0.00	84/1.38		6.8/0.19			0.1			118[e]	21	64	0	25		
5/4 1045	8,280	57	9.7	93	139	7.5	14/0.70	4.6/0.38	8.1/0.35	1.7/0.04	0.0/0.00	73/1.20	8.0/0.17	5.0/0.14	0.4/0.01	0.0/0.00	0.0	26	Fe 0.15 Cu 0.02 Zn 0.03 PO_4 0.05 Al 0.16 [d]	104[f]	24	54	0	15		
6/13 1255	9,260	69	9.1	100	132	7.5	1.14/c		6.6/0.29		0.0/0.00	71/1.16		2.0/0.06			0.1			94[e]	20	57	0	10		
7/13 0645	8,050	62	9.5	97	125	7.4	0.98/c		8.0/0.35		0.0/0.00	70/1.15		6.0/0.17			0.0			89[e]	26	49	0	3		
8/3 1125	7,700	63	9.6	99	123	7.3	0.98/c		6.7/0.29		0.0/0.00	72/1.18		1.5/0.04			0.1			88[e]	23	49	0	5		
9/13 0945	5,990	65	9.0	95	131	7.4	12/0.60	7.1/0.58	7.2/0.31	1.3/0.03	0.0/0.00	70/1.15	2.0/0.04	12/0.34	0.2/0.00	0.1/0.01	0.1	28	Fe 0.01 Cu 0.01 Zn 0.01 Al 0.05 PO_4 0.10 [d]	104[f]	20	59	2	5		
10/11 1625	5,800	58	10.4	101	134	7.5	1.10/c		6.3/0.27		0.0/0.00	71/1.16		5.0/0.14			0.0			95[e]	20	55	0	10		
11/2 1430	5,310	60	10.3	103	138	7.5	1.03/c		8.1/0.35		0.0/0.00	72/1.18		0.7/0.02			0.1			98[e]	25	52	0	15		
12/6 1335	9,260	48	10.5	90	151	7.3	1.16/c		8.2/0.36		0.0/0.00	67/1.10		5.0/0.14			0.1			107[e]	24	58	3	60		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT BUTTE CITY (STA. 87a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/2-20					167	7.2	14 / 0.70	7.1 / 0.58	9.1 / 0.40	2.3 / 0.06	0.0 / 0.00	84 / 1.38	10 / 0.21	5.5 / 0.16	0.1 / 0.00	0.1 / 0.01	0.1	33	Fe 0.01	122[f] 108[g]	23	64	0			
1/22-30					143	6.9	12 / 0.60	6.3 / 0.52	8.0 / 0.35	2.1 / 0.05	0.0 / 0.00	62 / 1.02	9.0 / 0.19	8.2 / 0.23	2.3 / 0.04	0.2 / 0.01	0.1	28	Fe 0.05	107[f] 98[g]	23	56	5			
2/1-6					123	6.9	10 / 0.50	6.3 / 0.52	6.0 / 0.26	1.9 / 0.05	0.0 / 0.00	51 / 0.84	11 / 0.23	6.2 / 0.17	2.5 / 0.04		0.1	24	Fe 0.15	93[f] 93[g]	20	51	9			
2/8-10					106	7.0	9.6 / 0.48	5.1 / 0.42	4.0 / 0.17	2.3 / 0.06	0.0 / 0.00	47 / 0.77	9.0 / 0.19	3.5 / 0.10	2.0 / 0.03		0.1	19	Fe 0.34	78[f]	15	45	6			
2/11-29					166	7.5	14 / 0.70	7.3 / 0.60	8.2 / 0.36	2.0 / 0.05	0.0 / 0.00	80 / 1.31	10 / 0.21	5.8 / 0.16	1.0 / 0.02	0.1 / 0.01	0.1	30	Fe 0.06	118[f] 107[g]	21	65	0			
3/1-4					201	7.6	14 / 0.70	9.7 / 0.80	14 / 0.61	2.1 / 0.05	0.0 / 0.00	106 / 1.74	11 / 0.23	5.5 / 0.16	0.9 / 0.01	0.1 / 0.01	0.2	43	Fe 0.00	152[f] 150[g]	28	75	0			
3/5-14					138	7.6	12 / 0.60	5.4 / 0.44	8.4 / 0.37	1.4 / 0.04	0.0 / 0.00	68 / 1.11	11 / 0.23	4.8 / 0.14	1.0 / 0.02	0.1 / 0.01	0.1	30	Fe 0.09	107[f] 116[g]	26	52	0			
3/15-30					162	7.6	14 / 0.70	8.3 / 0.68	8.0 / 0.35	1.6 / 0.04	0.0 / 0.00	82 / 1.34	12 / 0.25	4.7 / 0.13	0.2 / 0.00	0.1 / 0.01	0.0	29	Fe 0.02	118[f] 132[g]	20	69	2			
4/1-9					160	7.9	14 / 0.70	8.0 / 0.66	8.4 / 0.37	1.6 / 0.04	0.0 / 0.00	86 / 1.41	9.0 / 0.19	5.5 / 0.16	0.4 / 0.01	0.1 / 0.01	0.1	35	Fe 0.02	124[f] 117[g]	21	68	0			
4/10-19					161	8.0	15 / 0.75	6.9 / 0.57	8.1 / 0.35	1.6 / 0.04	0.0 / 0.00	88 / 1.44	8.0 / 0.17	4.5 / 0.13	0.3 / 0.00	0.1 / 0.01	0.0	33	Fe 0.02	121[f] 116[g]	20	66	0			
4/20-30					147	7.8	12 / 0.60	7.1 / 0.58	7.7 / 0.33	1.8 / 0.05	0.0 / 0.00	79 / 1.29	7.0 / 0.15	5.5 / 0.16	0.6 / 0.01	0.1 / 0.01	0.1	30	Fe 0.04	111[f] 107[g]	21	59	0			
5/1-9					144	7.7	13 / 0.65	6.0 / 0.49	8.5 / 0.37	1.3 / 0.03	0.0 / 0.00	77 / 1.26	7.0 / 0.15	2.0 / 0.06	0.8 / 0.01	0.1 / 0.01	0.0	31	Fe 0.00	108[f] 100[g]	24	57	0			
5/10-20					149	7.9	12 / 0.60	7.3 / 0.60	8.5 / 0.37	1.3 / 0.03	0.0 / 0.00	80 / 1.31	10 / 0.21	3.0 / 0.08	1.1 / 0.02	0.0 / 0.00	0.0	28	Fe 0.00	110[f] 102[g]	23	60	0			
5/22-31					142	7.9	10 / 0.50	8.5 / 0.70	8.0 / 0.35	1.2 / 0.03	0.0 / 0.00	74 / 1.21	15 / 0.31	1.5 / 0.04	1.0 / 0.02	0.0 / 0.00	0.0	31	Fe 0.00	112[f] 109[g]	22	60	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B-4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT BUTTE CITY (STA. 87a) (cont.)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
6/1-10					147	7.0	12 / 0.60	6.9 / 0.57	8.1 / 0.35	2.1 / 0.05	0.0 / 0.00	79 / 1.29	7.0 / 0.15	4.8 / 0.14	1.2 / 0.02	0.1 / 0.01	0.1	32	Fe 0.00	113[f] 101[g]	22	58	0			
6/12-22					139	7.1	11 / 0.55	6.0 / 0.49	7.8 / 0.34	2.1 / 0.05	0.0 / 0.00	74 / 1.21	6.0 / 0.12	4.2 / 0.12	0.9 / 0.01	0.1 / 0.01	0.1	32	Fe 0.00	106[f] 105[g]	24	52	0			
6/23-30					135	7.3	12 / 0.60	5.2 / 0.43	7.6 / 0.33	1.9 / 0.05	0.0 / 0.00	74 / 1.21	6.0 / 0.12	3.2 / 0.09	1.1 / 0.02	0.1 / 0.01	0.1	33	Fe 0.00	106[f] 101[g]	23	52	0			
7/1-9					137	7.1	12 / 0.60	4.6 / 0.38	8.2 / 0.36	1.7 / 0.04	0.0 / 0.00	70 / 1.15	6.0 / 0.12	3.5 / 0.10	1.4 / 0.02	0.0 / 0.00	0.0	24	Fe 0.01	95[f] 101[g]	26	49	0			
7/11-19					132	7.3	13 / 0.65	4.5 / 0.37	8.0 / 0.35	1.2 / 0.03	0.0 / 0.00	71 / 1.16	6.0 / 0.12	2.8 / 0.08	0.6 / 0.01	0.0 / 0.00	0.0	28	Fe 0.01	99[f] 97[g]	25	51	0			
7/20-31					135	7.5	13 / 0.65	4.7 / 0.39	7.7 / 0.33	1.1 / 0.03	0.0 / 0.00	73 / 1.20	6.0 / 0.12	2.5 / 0.07	0.4 / 0.01	0.1 / 0.01	0.1	25	Fe 0.01	97[f] 95[g]	24	52	0			
8/1-9					128	7.5	12 / 0.60	4.9 / 0.40	7.4 / 0.32	1.1 / 0.03	0.0 / 0.00	70 / 1.15	4.0 / 0.08	2.5 / 0.07	0.3 / 0.00	0.1 / 0.01	0.0	27	Fe 0.01	93[f] 91[g]	24	50	0			
8/12-20					131	7.3	12 / 0.60	4.9 / 0.40	7.3 / 0.32	1.1 / 0.03	0.0 / 0.00	68 / 1.11	6.0 / 0.12	2.5 / 0.07	1.1 / 0.02	0.1 / 0.01	0.0	26	Fe 0.01	94[f] 94[g]	24	50	0			
8/22-30					129	7.5	12 / 0.60	4.9 / 0.40	7.2 / 0.31	1.0 / 0.03	0.0 / 0.00	70 / 1.15	5.0 / 0.10	2.2 / 0.06	0.2 / 0.00	0.0 / 0.00	0.0	27	Fe 0.01	94[f] 99[g]	23	50	0			
9/1-10					134	7.4	11 / 0.55	5.6 / 0.46	7.1 / 0.31	1.2 / 0.03	0.0 / 0.00	69 / 1.13	6.0 / 0.12	4.1 / 0.12	0.3 / 0.00	0.0 / 0.00	0.1	28	Fe 0.00 Cu 0.01[d] Zn 0.06	103[g]	23	50	0			
9/11-20					137	7.4	12 / 0.60	4.7 / 0.39	7.0 / 0.30	1.3 / 0.03	0.0 / 0.00	71 / 1.16	5.4 / 0.11	3.3 / 0.09	0.7 / 0.01	0.0 / 0.00	0.0	26	Fe 0.00 Cu 0.02[d] Zn 0.01	94[f] 92[g]	22	50	0			
9/21-30					140	7.5	12 / 0.60	5.0 / 0.41	7.3 / 0.32	1.2 / 0.03	0.0 / 0.00	65 / 1.07	6.4 / 0.13	3.8 / 0.11	0.4 / 0.01	0.1 / 0.01	0.1	26	Fe 0.00 Cu 0.02[d] Zn 0.01	94[f] 97[g]	24	50	0			
10/1-10					135	7.4	12 / 0.60	4.9 / 0.40	8.0 / 0.35	1.7 / 0.04	0.0 / 0.00	72 / 1.18	5.0 / 0.10	3.0 / 0.08	1.2 / 0.02	0.1 / 0.01	0.1	27	Fe 0.00	98[f] 114[g]	25	50	0			
10/11-20					139	7.6	12 / 0.60	5.1 / 0.42	8.1 / 0.35	1.4 / 0.04	0.0 / 0.00	65 / 1.07	7.0 / 0.15	6.8 / 0.19	1.2 / 0.02	0.2 / 0.01	0.0	26	Fe 0.00	100[f] 110[g]	25	51	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT BUTTE CITY (STA. 87a) (cont.)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1960																										USGS
10/21-31					138	7.4	12 / 0.60	5.6 / 0.46	8.1 / 0.35	1.3 / 0.03	0.0 / 0.00	74 / 1.21	5.0 / 0.10	3.0 / 0.08	0.5 / 0.01	0.2 / 0.01	0.0	28	Fe 0.00	100[f] 108[g]	24	53	0			
11/1-7					144	7.4	12 / 0.60	5.8 / 0.48	8.0 / 0.35	1.7 / 0.04	0.0 / 0.00	76 / 1.25	5.0 / 0.10	5.2 / 0.15	0.7 / 0.01	0.2 / 0.01	0.0	30	Fe 0.00	106[f] 98[g]	24	54	0			
11/8-15					144	7.4	13 / 0.65	4.7 / 0.39	8.4 / 0.37	1.9 / 0.05	0.0 / 0.00	74 / 1.21	5.0 / 0.10	4.5 / 0.13	1.0 / 0.02	0.2 / 0.01	0.1	29	Fe 0.00	104[f] 108[g]	25	52	0			
11/16-25					155	7.5	12 / 0.60	6.8 / 0.56	9.0 / 0.39	1.9 / 0.05	0.0 / 0.00	80 / 1.31	7.0 / 0.15	4.5 / 0.13	1.0 / 0.02	0.2 / 0.01	0.1	31	Fe 0.01	113[f] 118[g]	24	58	0			
11/26-28					115	7.3	9.6 / 0.48	4.9 / 0.40	6.7 / 0.29	1.8 / 0.05	0.0 / 0.00	64 / 1.05	5.0 / 0.10	2.5 / 0.07	2.5 / 0.04	0.3 / 0.02	0.1	25	Fe 0.08	90[f] 112[g]	24	44	0			
11/29-30					151	6.6	12 / 0.60	5.8 / 0.48	9.0 / 0.39	2.1 / 0.05	0.0 / 0.00	71 / 1.16	8.0 / 0.17	6.0 / 0.17	1.1 / 0.02		0.0	28	Fe 0.03	107[f] 124[g]	26	54	0			
12/1-8					149	6.6	12 / 0.60	5.8 / 0.48	9.1 / 0.40	1.7 / 0.04	0.0 / 0.00	65 / 1.07	10 / 0.21	5.8 / 0.16	1.4 / 0.02	0.3 / 0.02	0.1	27	Fe 0.09	105[f] 116[g]	26	54	1			
12/9-16					172	7.2	12 / 0.60	8.4 / 0.69	9.1 / 0.40	1.7 / 0.04	0.0 / 0.00	80 / 1.31	13 / 0.27	5.2 / 0.15	1.1 / 0.02	0.2 / 0.01	0.0	32	Fe 0.04	122[f] 123[g]	23	65	0			
12/18-20					127	7.0	12 / 0.60	4.1 / 0.34	7.9 / 0.34	1.0 / 0.03	0.0 / 0.00	58 / 0.95	7.0 / 0.15	4.5 / 0.13	1.4 / 0.02	0.3 / 0.02	0.1	19	Fe 0.19	86[f] 100[g]	26	47	0			
12/21-30					161	7.2	14 / 0.70	6.6 / 0.54	8.4 / 0.37	1.3 / 0.03	0.0 / 0.00	74 / 1.21	9.0 / 0.19	5.3 / 0.15	1.0 / 0.02	0.2 / 0.01	0.0	30	Fe 0.05	112[f]	23	62	1			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER ABOVE COLUSA TROUGH (STA. 14b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
7/8 1025	6,300	70	8.2	91	157	7.3	1.18[c]		9.6 / 0.42		0.0 / 0.00	82 / 1.34		5.8 / 0.16			0.0			111[e]	26	59	0	25	Median 36.5	
8/12 1615	6,316	72	8.0	91	158	7.3	1.20[c]		11 / 0.48		0.0 / 0.00	80 / 1.31		6.0 / 0.17			0.0			112[e]	29	60	0	15	Maximum 130.	
9/15 1110	6,272	70	8.5	94	164	7.5	13 / 0.65	7.8 / 0.64	12 / 0.52	1.3 / 0.03	0.0 / 0.00	89 / 1.46	10 / 0.21	3.5 / 0.10	0.2 / 0.00	0.1 / 0.01	0.0	25	Fe 0.04 Zn 0.01[d] Al 0.03 PO_4 0.15	116[f]	28	65	0	10	Minimum 0.62	
10/3 1515	6,053	68	9.1	99	164	7.5	1.24[c]		11 / 0.48		0.0 / 0.00	81 / 1.33		4.0 / 0.11			0.0			116[e]	28	62	0	10		
11/4 1100	5,923	56	9.2	87	144	7.3	1.14[c]		9.0 / 0.39		0.0 / 0.00	75 / 1.23		3.8 / 0.11			0.1			102[e]	25	57	0	10		
12/9 0940	9,030	47	10.8	92	164	7.3	1.24[c]		9.1 / 0.40		0.0 / 0.00	76 / 1.25		8.0 / 0.23			0.1			116[e]	24	62	0	70		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT COLUSA (STA. 13b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH [a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform [h] MPN/ml	Analyzed by [i]
1960																										USGS
1/13 1035	6,380	45	11.4	86	156	7.3	—/1.16[c]		9.6/0.42		0.0/0.00	76/1.25		8.5/0.24			0.1			115[e]	27	58	0	15		
2/3 1115	30,500	49	9.8	85	97.5	7.1	—/0.90[c]		4.5/0.20		0.0/0.00	39/0.64		10/0.28			0.0			72[e]	18	45	13	540		
3/9 1400	28,900	54	10.1	93	101	7.3	—/0.86[c]		4.2/0.18		0.0/0.00	42/0.69		3.5/0.10			0.0			75[e]	17	43	9	700		
4/13 1215	3,860	63	9.4	97	171	7.3	—/1.36[c]		8.1/0.35		0.0/0.00	90/1.48		5.4/0.15			0.0			127[e]	20	68	0	20		
5/4 0945	7,740	58	9.8	96	139	7.5	12/0.60	5.2/0.43	7.3/0.32	1.9/0.05	0.0/0.00	72/1.18	6.6/0.14	3.6/0.10	0.0/0.00	0.0/0.00	0.2	26	Fe 0.08 PO4 0.10 Al 0.06 Zn 0.02 [d]	98[f]	23	52	0	8		
6/13 1450	6,670	72	8.8	100	132	7.5	—/1.04[c]		7.3/0.32		0.0/0.00	70/1.15		4.2/0.12			0.1			98[e]	24	52	0	7		
7/13 0735	7,630	65	9.0	95	126	7.5	—/1.20[c]		6.2/0.27		0.0/0.00	71/1.16		2.5/0.07			0.0			93[e]	18	60	2	25		
8/3 1200	7,300	66	9.0	96	124	7.3	—/0.97[c]		7.0/0.30		0.0/0.00	70/1.15		3.0/0.08			0.0			92[e]	24	49	0	5		
9/13 1030	5,650	66	9.0	96	132	7.4	11/0.55	6.2/0.51	8.5/0.37	1.2/0.03	0.0/0.00	75/1.23	6.0/0.12	3.0/0.08	0.2/0.00	0.0/0.00	0.0	27	Fe 0.02 Cu 0.01 Al 0.07 PO4 0.05 [d]	100[f]	25	53	0	25		
10/12 0710	5,550	57	10.1	97	134	7.3	—/1.08[c]		6.9/0.30		0.0/0.00	71/1.16		3.0/0.08			0.2			99[e]	22	54	0	4		
11/2 1545	5,050	60	10.0	100	141	7.3	—/1.12[c]		8.2/0.36		0.0/0.00	74/1.21		4.9/0.14			0.1			104[e]	24	56	0	3		
12/6 1405	10,500	48	10.3	88	146	7.3	—/1.26[c]		7.7/0.33		0.0/0.00	64/1.05		7.0/0.20			0.1			108[e]	21	63	11	50		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT DELTA (STA. 11)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/4 1410	213	38	14.4	107	152	7.7	1.08[c]		11 / 0.48		0.0 / 0.00	76 / 1.25		8.8 / 0.25			0.2			108[e]	31	54	0	1	Median 6.2	
2/10 0800	4,540	44	11.4	93	65.7	7.3	0.62[c]		2.2 / 0.10		0.0 / 0.00	36 / 0.59		3.0 / 0.08			0.0			47[e]	14	31	1	15	Maximum 62.	
3/7 1355	8,860	47	11.1	94	63.2	7.2	0.52[c]		3.8 / 0.17		0.0 / 0.00	30 / 0.49		2.5 / 0.07			0.0			45[e]	25	26	1	600	Minimum <0.045	
4/11 1335	1,580	51	10.8	97	79.7	7.3	0.72[c]		2.0 / 0.09		0.0 / 0.00	44 / 0.72		2.5 / 0.07			0.1			57[e]	11	36	0	10		
5/2 1410	1,290	53	10.5	96	89.0	7.5	5.4 / 0.27	6.2 / 0.51	3.2 / 0.14	0.7 / 0.02	0.0 / 0.00	49 / 0.80	4.4 / 0.09	2.4 / 0.07	0.0 / 0.00	0.0 / 0.00	0.1	20	Fe 0.05 / Al 0.04; PO_4 0.00[d]	66[f]	15	39	0	1		
6/6 1540	1,120	63	9.1	94	85.7	7.7	0.84[c]		3.1 / 0.13		0.0 / 0.00	51 / 0.84		2.8 / 0.08			0.1			61[e]	13	42	0	1		
7/5 0805	332	67	8.9	96	129	7.7	1.24[c]		6.4 / 0.28		0.0 / 0.00	72 / 1.18		5.5 / 0.16			0.0			92[e]	18	62	3	4		
8/9 0845	202	70	8.8	98	151	7.7	1.06[c]		11 / 0.48		0.0 / 0.00	77 / 1.26		7.2 / 0.20			0.2			108[e]	31	53	0	3		
9/6 0615	181	62	8.8	90	157	7.5	9.8 / 0.49	6.7 / 0.55	13 / 0.57	0.9 / 0.02	0.0 / 0.00	84 / 1.38	3.0 / 0.06	9.0 / 0.25	0.0 / 0.00	0.0 / 0.00	0.2	26	Fe 0.02 / Al 0.04; PO_4 0.05[d]	110[f]	35	52	0	7		
10/11 0835	232	52	10.2	92	153	7.5	8.0 / 0.40	8.5 / 0.70	11 / 0.48		0.0 / 0.00	79 / 1.29		7.5 / 0.21			0.1			109[e]	30	55	0	5		
11/8 0845	218	50	10.8	95	135	7.5	1.03[c]		12 / 0.52		0.0 / 0.00	79 / 1.29		6.7 / 0.19			0.2			96[e]	34	52	0	5		
12/13 1020	602	42	12.2	97	116	7.4	0.90[c]		5.9 / 0.26		0.0 / 0.00	62 / 1.02		4.0 / 0.11			0.0			83[e]	22	45	0	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS);; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT FREEPORT (STA. 15b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in ppm / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960	Daily Mean																									USGS
6/6 0630	13,700	70	8.0	89	138	7.3	1.10[c]		8.4 / 0.37		0.0 / 0.00	65 / 1.07		10 / 0.28			0.0			90[e]	25	55	2	6	Maximum >7,000. Minimum 6.2 Median 230	
7/11 0810	10,900	68	8.1	88	170	7.3	1.26[c]		11 / 0.48		0.0 / 0.00	83 / 1.36		9.2 / 0.26			0.0			110[e]	28	63	0	15		
8/1 0820	9,960	69	8.1	89	170	7.3	1.20[c]		12 / 0.52		0.0 / 0.00	76 / 1.25		11 / 0.31			0.0			110[e]	30	60	0	25		
9/5 0750	10,700	67	7.7	83	227	7.3	14 / 0.70	11 / 0.87	20 / 0.87	1.0 / 0.03	0.0 / 0.00	115 / 1.88	13 / 0.27	12 / 0.34	0.0 / 0.00	0.1 / 0.01	0.1	19	Fe 0.03 PO_4 0.35[d] Al 0.03 Zn 0.01	147[f]	35	78	0	20		
10/7 1030	8,080	68	7.9	86	179	7.3	1.38[c]		11 / 0.48		0.0 / 0.00	82 / 1.34		8.5 / 0.24			0.1			116[e]	26	69	2	20		
11/7 0855	8,430	56	9.3	85	166	7.3	1.24[c]		8.3 / 0.36		0.0 / 0.00	80 / 1.31		6.5 / 0.18			0.0			107[e]	22	62	0	10		
12/12 0730	15,100	47	10.7	91	184	7.3	1.52[c]		12 / 0.52		0.0 / 0.00	80 / 1.31		11 / 0.31			0.0			119[e]	25	76	10	60		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT FREEPORT (STA. 15b)

Date and time sampled P.S.T.	Discharge in cfs Avg. M.D.	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										
6/1-11	12,800				155	7.6	12 / 0.60	5.6 / 0.46	11 / 0.48	0.9 / 0.02	0 / 0.00	70 / 1.15	10 / 0.21	8.5 / 0.24	0.1 / 0.00	0.1 / 0.01	0.0	25	Fe 0.01	107[f] / 134[g]	31	53	0			USGS
6/12-21	9,380				183	7.6	12 / 0.60	7.5 / 0.62	14 / 0.61	1.0 / 0.03	0 / 0.00	82 / 1.34	16 / 0.33	8.5 / 0.24	0.2 / 0.00	0.1 / 0.01	0.1	25	Fe 0.02	124[f] / 157[g]	33	61	0			
6/22-30	10,200				167	7.7	12 / 0.60	6.6 / 0.54	15 / 0.65	0.9 / 0.02	0 / 0.00	76 / 1.25	12 / 0.25	9.8 / 0.28	0.2 / 0.00	0.1 / 0.01	0.0	25	Fe 0.04	119[f] / 137[g]	36	57	0			
7/1-10	11,000				174	7.7	12 / 0.60	7.1 / 0.58	14 / 0.61	1.1 / 0.03	0 / 0.00	83 / 1.36	9.0 / 0.19	9.2 / 0.26	1.1 / 0.02	0.0 / 0.00	0.0	29	Fe 0.02	124[f] / 127[g]	34	59	0			
7/11-20	10,100				181	7.6	12 / 0.60	8.0 / 0.66	15 / 0.65	1.1 / 0.03	0 / 0.00	86 / 1.41	10 / 0.21	9.2 / 0.26	1.0 / 0.02	0.0 / 0.00	0.1	28	Fe 0.02	126[f] / 131[g]	34	63	0			
7/21-31	10,000				173	7.5	13 / 0.65	6.7 / 0.55	14 / 0.61	1.1 / 0.03	0 / 0.00	83 / 1.36	8.0 / 0.17	9.0 / 0.25	1.1 / 0.02	0.0 / 0.00	0.0	26	Fe 0.02	120[f] / 124[g]	33	60	0			
8/1-2	9,920				172	7.3	12 / 0.60	7.1 / 0.58	12 / 0.52	1.2 / 0.03	0 / 0.00	76 / 1.25	8.0 / 0.17	8.5 / 0.24	1.0 / 0.02	---	0.1	23	Fe 0.00	110[f] / ---	30	59	0			
8/3-15	9,760				192	7.7	13 / 0.65	7.9 / 0.65	14 / 0.61	1.2 / 0.03	0 / 0.00	86 / 1.41	12 / 0.25	9.5 / 0.27	0.8 / 0.01	0.0 / 0.00	0.1	24	Fe 0.00	124[f] / 128[g]	31	65	0			
8/16-25	9,710				203	8.1	14 / 0.70	8.0 / 0.66	16 / 0.70	1.2 / 0.03	0 / 0.00	92 / 1.51	11 / 0.23	10 / 0.28	0.9 / 0.01	0.0 / 0.00	0.1	25	Fe 0.00	131[f] / 134[g]	33	68	0			
8/26-31	9,640				217	8.2	14 / 0.70	8.5 / 0.70	17 / 0.74	1.2 / 0.03	0 / 0.00	96 / 1.57	13 / 0.27	12 / 0.34	1.0 / 0.02	0.0 / 0.00	0.0	25	Fe 0.00	139[f] / 140[g]	34	70	0			
9/1-10	10,500				230	7.9	17 / 0.85	8.9 / 0.73	18 / 0.78	1.1 / 0.03	0 / 0.00	108 / 1.77	13 / 0.27	12 / 0.34	1.6 / 0.03	0.1 / 0.01	0.0	23	Fe 0.00	148[f] / 145[g]	33	79	0			
9/11-20	9,670				219	7.6	17 / 0.85	8.6 / 0.71	17 / 0.74	1.6 / 0.04	0 / 0.00	106 / 1.74	13 / 0.27	12 / 0.34	1.5 / 0.02	0.1 / 0.01	0.0	24	Fe 0.00	147[f] / 147[g]	32	78	0			
9/21-30	8,740				194	8.0	16 / 0.80	7.3 / 0.60	13 / 0.57	1.4 / 0.04	0 / 0.00	92 / 1.51	11 / 0.23	9.5 / 0.27	1.7 / 0.03	0.1 / 0.01	0.0	23	Fe 0.00	128[f] / 129[g]	28	70	0			
10/1-11	8,040				185	7.4	14 / 0.70	7.5 / 0.62	12 / 0.52	1.3 / 0.03	0 / 0.00	87 / 1.43	9.0 / 0.19	9.5 / 0.27	1.6 / 0.03	0.1 / 0.01	0.0	24	Fe 0.00	122[f] / 134[g]	28	66	0			
10/12-20	7,220				174	7.2	14 / 0.70	7.1 / 0.58	11 / 0.48	1.4 / 0.04	0 / 0.00	83 / 1.36	8.0 / 0.17	8.0 / 0.23	1.6 / 0.03	0.2 / 0.01	0.0	25	Fe 0.00	117[f] / 123[g]	27	64	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT FREEPORT (STA. 15b continued)

Date and time sampled P.S.T.	Discharge in cfs Avg. M.D.	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										
10/21-31	7,400				179	7.4	14 / 0.70	7.1 / 0.58	12 / 0.52	1.4 / 0.04	0 / 0.00	85 / 1.39	10 / 0.21	8.0 / 0.23	1.6 / 0.03	0.1 / 0.01	0.0	24	Fe 0.00	120[f] / 123[g]	28	64	0			USGS
11/1-9	8,220				171	7.9	13 / 0.65	6.7 / 0.55	11 / 0.48	1.4 / 0.04	0 / 0.00	84 / 1.38	8.0 / 0.17	6.8 / 0.19	1.5 / 0.02	0.1 / 0.01	0.0	25	Fe 0.00	114[f] / 108[g]	28	60	0			
11/10-19	10,800				168	7.6	14 / 0.70	6.1 / 0.50	11 / 0.48	1.3 / 0.03	0 / 0.00	82 / 1.34	9.0 / 0.19	6.5 / 0.18	1.4 / 0.02	0.1 / 0.01	0.1	25	Fe 0.02	115[f] / 110[g]	28	60	0			
11/20-28	13,100				169	7.7	14 / 0.70	6.6 / 0.54	11 / 0.48	1.5 / 0.04	0 / 0.00	82 / 1.34	8.0 / 0.17	6.5 / 0.18	1.2 / 0.02	0.0 / 0.00	0.1	23	Fe 0.00	112[f] / 115[g]	27	62	0			
11/29-30	19,000				124	7.1	9.6 / 0.48	4.6 / 0.38	7.5 / 0.33	1.4 / 0.04	0 / 0.00	51 / 0.84	7.0 / 0.15	6.0 / 0.17	3.4 / 0.05	—	0.0	20	Fe 0.03	85[f] / 98[g]	27	43	1			
12/1-3	20,500				167	7.2	13 / 0.65	6.0 / 0.49	11 / 0.48	1.5 / 0.04	0 / 0.00	70 / 1.15	11 / 0.23	9.5 / 0.27	3.0 / 0.05	0.1 / 0.01	0.0	23	Fe 0.01	112[f] / 112[g]	29	57	0			
12/4-7	28,900				111	6.9	8.8 / 0.44	4.4 / 0.36	5.7 / 0.25	1.5 / 0.04	0 / 0.00	43 / 0.70	7.0 / 0.15	6.5 / 0.18	2.1 / 0.03	0.1 / 0.01	0.0	16	Fe 0.03	73[f] / 72[g]	23	40	5			
12/8-19	16,000				170	8.1	14 / 0.70	6.6 / 0.54	10 / 0.44	1.5 / 0.04	0 / 0.00	76 / 1.25	12 / 0.25	8.0 / 0.23	1.5 / 0.02	0.1 / 0.01	0.0	21	Fe 0.03	112[f] / 116[g]	26	62	0			
12/20-31	17,500				158	8.1	12 / 0.60	6.3 / 0.52	9.3 / 0.40	1.2 / 0.03	0 / 0.00	68 / 1.11	10 / 0.21	8.5 / 0.24	1.8 / 0.03	0.1 / 0.01	0.1	20	Fe 0.01	102[f] / 101[g]	26	56	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER NEAR HAMILTON CITY (STA. 13)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/13 0750	5,930	45	11.5	95	153	7.3	1.14[c]		9.5 / 0.41		0.0 / 0.00	74 / 1.21		7.5 / 0.21			0.1			110[e]	26	57	0	6	Median 62.	
2/2 1620	38,700	50	10.5	93	93.5	7.2	0.92[c]		3.8 / 0.17		0.0 / 0.00	38 / 0.62		9.0 / 0.25			0.0			68[e]	16	46	15	300	Maximum 2,400.	
3/9 1105	6,390	51	10.7	96	105	7.3	0.86[c]		4.5 / 0.20		0.0 / 0.00	48 / 0.79		3.5 / 0.10			0.0			76[e]	19	43	4	350	Minimum 23.	
4/12 1600	3,740	60	9.8	98	147	7.5	1.16[c]		6.6 / 0.29		0.0 / 0.00	74 / 1.21		5.5 / 0.16			0.1			106[e]	20	58	0	10		
5/9 1125	7,360	60	9.8	98	131	7.3	11 / 0.55	6.9 / 0.57	6.6 / 0.29	1.3 / 0.03	0.0 / 0.00	72 / 1.18	9.0 / 0.19	3.5 / 0.10	0.4 / 0.01	0.1 / 0.01	0.0	25	Fe 0.08 Al 0.31[d] Cu 0.01 PO_4 0.05	99[f]	20	56	0	15		
6/15 0830	7,110	62	9.1	93	126	7.3	1.00[c]		6.5 / 0.28		0.0 / 0.00	67 / 1.10		4.8 / 0.14			0.0			91[e]	22	50	0	3		
7/11 1145	8,570	59	10.1	100	121	7.4	1.10[c]		6.2 / 0.27		0.0 / 0.00	68 / 1.11		3.0 / 0.08			0.0			87[e]	20	55	0	10		
8/2 1040	8,130	58	9.8	95	120	7.3	0.95[c]		7.0 / 0.30		0.0 / 0.00	69 / 1.13		2.5 / 0.07			0.0			87[e]	24	48	0	2		
9/12 1000	5,830	63	9.3	96	123	7.3	9.2 / 0.46	5.8 / 0.48	7.7 / 0.33	1.1 / 0.03	0.0 / 0.00	70 / 1.15	5.0 / 0.10	2.5 / 0.07	0.0 / 0.00	0.0 / 0.00	0.0	27	Fe 0.02 Al 0.08[d] PO_4 0.05	92[f]	25	47	0	20		
10/10 1405	5,900	57	10.0	96	128	7.3	11 / 0.55	4.7 / 0.39	7.3 / 0.32		0.0 / 0.00	67 / 1.10		3.5 / 0.10			0.0			92[e]	25	47	0	1		
11/1 1245	5,410	60	9.9	99	130	7.5	0.98		7.6 / 0.33		0.0 / 0.00	69 / 1.13		4.8 / 0.14			0.0			94[e]	25	49	0	3		
12/5 1110	9,390	49	10.1	88	140	7.1	1.20[c]		7.1 / 0.31		0.0 / 0.00	87 / 1.43		5.5 / 0.16			0.1			101[e]	21	60	0	9		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT KESWICK (STA. 12)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/4 1110	3,740	50	10.8	97	137	7.1	1.12[c]		8.7 / 0.38		0.0 / 0.00	72 / 1.18		4.2 / 0.12			0.0			99[e]	25	56	0	1	Median 0.12	
2/2 0840	8,340	48	10.0	86	133	7.0	1.08[c]		7.3 / 0.32		0.0 / 0.00	63 / 1.03		7.0 / 0.20			0.0			96[e]	23	54	2	35	Maximum 6.2	
3/7 1550	4,380	48	10.1	87	126	6.9	1.00[c]		6.4 / 0.28		0.0 / 0.00	50 / 0.82		4.2 / 0.12			0.1			91[e]	22	50	9	60	Minimum <0.045	
4/12 0815	3,130	49	11.1	97	131	7.1	1.04[c]		5.8 / 0.25		0.0 / 0.00	62 / 1.02		5.5 / 0.16			0.0			94[e]	19	52	1	15		
5/11 0715	7,620	50	10.6	93	120	7.1	10 / 0.50	5.1 / 0.42	6.1 / 0.27	1.6 / 0.04	0.0 / 0.00	64 / 1.05	5.0 / 0.10	3.5 / 0.10	0.4 / 0.01	0.0 / 0.00	0.0	23	Fe 0.13 Cu 0.01 Al 0.32 Zn 0.03 PO_4 0.05 [d]	87[f]	22	46	0	15		
6/6 1145	8,000	51	10.4	93	117	7.3	0.90[c]		6.5 / 0.28		0.0 / 0.00	65 / 1.07		5.5 / 0.16			0.0			84[e]	24	45	0	2		
7/4 1500	11,600	50	10.1	89	119	7.3	0.96[c]		6.2 / 0.27		0.0 / 0.00	65 / 1.07		5.0 / 0.14			0.0			86[e]	22	48	0	12		
8/8 1150	10,800	51	10.0	89	113	7.1	0.88[c]		6.3 / 0.27		0.0 / 0.00	63 / 1.03		2.8 / 0.08			0.0			82[e]	23	44	0	2		
9/5 1445	7,780	55	9.4	88	113	7.1	9.8 / 0.49	5.2 / 0.43	6.8 / 0.30	0.8 / 0.02	0.0 / 0.00	62 / 1.02	6.0 / 0.12	2.8 / 0.08	0.3 / 0.00	0.0 / 0.00	0.0	21	Fe 0.06 Cu 0.01 Al 0.07 Zn 0.04 PO_4 0.05 [d]	84[f]	24	46	0	7		
10/10 1430	6,260	55	9.1	85	115	7.1	9.6 / 0.48	5.1 / 0.42	6.1 / 0.27		0.0 / 0.00	61 / 1.00		2.5 / 0.07			0.0			83[e]	23	45	0	1		
11/7 1430	5,720	56	8.5	81	124	7.1	0.94[c]		7.5 / 0.33		0.0 / 0.00	65 / 1.07		1.9 / 0.05			0.0			89[e]	26	47	0	3		
12/12 1350	3,700	51	9.4	84	133	7.1	1.38[c]		7.5 / 0.33		0.0 / 0.00	106 / 1.74		3.0 / 0.08			0.0			96[e]	19	69	0	6		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT KNIGHTS LANDING (STA. 14)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/27--31 2/1-3					206	7.2	13/0.65	7.7/0.63	16/0.70	2.5/0.06	0.0/0.00	76/1.25	24/0.50	10/0.28	2.2/0.04	0.2/0.01	0.1	27	Fe 0.04	167[g] 169[g]	34	64	2			
2/4-13					126	7.4	11/0.55	5.5/0.45	5.7/0.25	2.1/0.05	0.0/0.00	54/0.89	15/0.31	5.0/0.14	0.2/0.00	0.0/0.00	0.1	22	Fe 0.16	94[f] 137[g]	19	50	6			
2/14-19					163	7.6	14/0.70	6.8/0.56	8.0/0.35	2.1/0.05	0.0/0.00	75/1.23	13/0.27	5.2/0.15	1.9/0.03	0.2/0.01	0.0	29	Fe 0.07	118[f] 133[g]	21	63	1			
2/20-29					213	7.7	16/0.80	9.0/0.74	13/0.57	2.1/0.05	0.0/0.00	99/1.62	19/0.40	7.8/0.22	0.2/0.00	0.0/0.00	0.0	33	Fe 0.02	150[f] 156[g]	26	77	0			
3/1-5					189	7.3	8.0/0.40	13/1.08	11/0.48	1.7/0.04	0.0/0.00	88/1.44	17/0.35	6.0/0.17	0.8/0.01	0.1/0.01	0.1	28	Fe 0.03	129[f] 131[g]	24	74	2			
3/6-11					109	7.0	8.8/0.44	6.1/0.50	4.9/0.21	1.2/0.03	0.0/0.00	53/0.87	9.0/0.19	3.5/0.10	0.9/0.01	0.1/0.01	0.1	18	Fe 0.12	79[f] 90[g]	18	47	4			
3/12-19					158	7.3	15/0.75	6.4/0.53	7.7/0.33	1.4/0.04	0.0/0.00	77/1.26	12/0.25	5.5/0.16	0.7/0.01	0.2/0.01	0.0	22	Fe 0.05	109[f] 109[g]	20	64	1			
3/20-31					191	7.9	15/0.75	9.6/0.79	11/0.48	1.6/0.04	0.0/0.00	90/1.48	15/0.31	7.5/0.21	0.4/0.01	0.1/0.01	0.0	25	Fe 0.01	129[f] 123[g]	23	77	3			
4/1-13					184	7.9	15/0.75	8.4/0.69	11/0.48	1.5/0.04	0.0/0.00	92/1.51	13/0.27	8.0/0.23	0.6/0.01	0.1/0.01	0.1	29	Fe 0.01	132[f] 125[g]	24	72	0			
4/14-25					181	7.8	16/0.80	7.3/0.60	10/0.44	1.6/0.04	0.0/0.00	92/1.51	9.0/0.19	7.8/0.22	0.3/0.00	0.1/0.01	0.1	28	Fe 0.01	116[g]	23	70	0			
5/3-12					243	8.1	17/0.85	8.1/0.67	22/0.96	1.9/0.05	0.0/0.00	108/1.77	17/0.35	12/0.34	0.7/0.01	0.3/0.02	0.1	25	Fe 0.01	164[g]	38	76	0			
5/13-17					329	8.1	18/0.90	12/1.02	34/1.48	2.2/0.06	0.0/0.00	140/2.29	31/0.65	17/0.48	0.9/0.01	0.2/0.01	0.2	24	Fe 0.01	209[g]	43	96	0			
5/18-31					244	8.0	15/0.75	11/0.89	22/0.96	1.9/0.05	0.0/0.00	112/1.84	25/0.52	12/0.34	0.7/0.01	0.2/0.01	0.1	25	Fe 0.01	168[f] 166[g]	36	82	0			
Station discontinued 6/1/60																										

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT KNIGHTS LANDING (STA. 14)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/7 1030	5,100	43	11.6	93	198	7.4	1.40[c]		14 / 0.61		0.0 / 0.00	92 / 1.51		8.5 / 0.24			0.0			124[e]	30	70	0	3	Median 23.	
2/16 0940	17,600	50	10.2	90	154	7.2	1.14[c]		7.0 / 0.30		0.0 / 0.00	69 / 1.13		7.2 / 0.20			0.1			96[e]	21	57	0	125	Maximum 620.	
3/4 1220	7,850	52	10.1	91	186	7.3	1.44[c]		9.6 / 0.42		0.0 / 0.00	89 / 1.46		8.5 / 0.24			0.1			116[e]	23	72	0	50	Minimum 0.62	
4/4 1200	9,110	62	9.2	94	149	7.4	1.19[c]		6.8 / 0.30		0.0 / 0.00	74 / 1.21		6.8 / 0.19			0.0			93[e]	20	59	0	20		
5/9 1535	7,120	71	7.9	89	358	7.5	19 / 0.95	14 / 1.13	41 / 1.78	2.6 / 0.07	0.0 / 0.00	140 / 2.29	47 / 0.98	19 / 0.54	1.1 / 0.02	0.2 / 0.01	0.2	15	Fe 0.07 PO_4 0.25[d] Al 0.34	228[f]	45	104	0	150		
6/	Discontinued																									

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER NEAR MALLARD SLOUGH (STA. 15c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm (g)	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform MPN/ml (h)	Analyzed by (i)
1960																										
1/13 1130		47			4007				497					1019						2288	54					USBR
2/15 1140		53			252				21					34						162	36					
3/15 1100		55			218				16					24						144	32					
4/14 1300		64			236				27					40						172	50					
5/12 1310		--			876				102					208						488	51					
6/16 1150		--			5439				961					1775						3632	77					
7/14 1400		77			6690				1175					2293						4732	76					
8/18 1015		78			11360				1645					3145						6552	63					
9/16 1300		66			6158				1035					973						3952	73					
10/11 1335		78			6957				1058					2087						4416	66					
11/15 1030		50			3493				478					895						1864	59					
12/16 1030		49			1371				185					350						816	59					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT RIO VISTA (STA. 16)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Tidal																									USGS
1/11 1200		44	10.7	87	211	7.3	1.54[c]		14 / 0.61		0.0 / 0.00	92 / 1.51		14 / 0.39			0.0			132[e]	28	77	2	8	Maximum >7,000 Minimum 2.3 Median 62.	
2/2 1020		51	9.5	85	163	7.3	1.36[c]		12 / 0.52		0.0 / 0.00	68 / 1.11		11 / 0.31			0.3			102[e]	28	68	12	60		
3/1 1010		49	10.0	87	205	7.3	1.50[c]		13 / 0.57		0.0 / 0.00	86 / 1.41		12 / 0.34			0.1			128[e]	28	75	4	250		
4/11 1140		60	9.3	92	124	7.2	0.98[c]		6.5 / 0.28		0.0 / 0.00	57 / 0.93		4.5 / 0.13			0.0			78[e]	22	49	2	45		
5/2 0905		59	9.5	93	162	7.3	14 / 0.70	6.6 / 0.54	11 / 0.48	1.2 / 0.03	0.0 / 0.00	71 / 1.16	14 / 0.29	9.8 / 0.28	0.5 / 0.01	0.1 / 0.01	0.1	19	Fe 0.10 PO_4 0.15 Al 0.09 As 0.01 [d]	111[f]	27	62	4	30		
6/6 0900		70	8.0	89	173	7.3	1.20[c]		12 / 0.52		0.0 / 0.00	78 / 1.28		10 / 0.28			0.1			108[e]	30	60	0	10		
7/11 1000		69	8.5	94	183	7.5	1.26[c]		12 / 0.52		0.0 / 0.00	81 / 1.33		10 / 0.28			0.0			115[e]	29	63	0	100		
8/1 1210		71	8.4	94	175	7.5	1.32[c]		13 / 0.57		0.0 / 0.00	78 / 1.28		10 / 0.28			0.1			109[e]	30	66	2	50		
9/5 0935		69	7.5	82	218	7.3	13 / 0.65	9.5 / 0.78	19 / 0.83	1.0 / 0.03	0.0 / 0.00	107 / 1.75	12 / 0.25	12 / 0.34	0.0 / 0.00	0.2 / 0.01	0.2	19	Fe 0.05 PO_4 0.25 Al 0.14 [d]	139[f]	36	72	0	25		
10/3 1055		67	8.3	90	201	7.3	1.48[c]		14 / 0.61		0.0 / 0.00	94 / 1.54		9.5 / 0.27			0.1			126[e]	29	74	0	35		
11/7 1035		59	7.9	78	182	7.3	1.38[c]		9.9 / 0.43		0.0 / 0.00	86 / 1.41		7.5 / 0.21			0.1			114[e]	24	69	0	15		
12/12 1010		46	10.4	87	184	7.3	1.14[c]		12 / 0.52		0.0 / 0.00	74 / 1.21		12 / 0.34			0.1			115[e]	31	57	0	80		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT SACRAMENTO (STA. 15)

Date and time sampled P.S.T.	Discharge in cfs Avg. M.D.	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										
1/1, 3-7, 9-10	8,000				195	7.2	14 / 0.70	7.3 / 0.60	13 / 0.57	2.0 / 0.05	0 / 0.00	92 / 1.51	12 / 0.25	7.0 / 0.20	0.5 / 0.01	0.1 / 0.01	0.1	0.5	Fe 0.03	102[f] / 129[g]	30	65	0			USGS
1/11-15, 17-21, 23, 25-26	10,800				196	7.7	12 / 0.60	9.4 / 0.77	12 / 0.52	2.1 / 0.05	0 / 0.00	85 / 1.39	14 / 0.29	11 / 0.31	0.8 / 0.01	0.1 / 0.01	0.1	16	Fe 0.06	122[f] / 126[g]	27	68	0			
1/27-28, 30-31	18,400				146	7.0	11 / 0.55	6.4 / 0.53	9.9 / 0.43	1.9 / 0.05	0 / 0.00	64 / 1.05	10 / 0.21	11 / 0.31	1.3 / 0.02	0.1 / 0.01	0.1	9.2	Fe 0.18	93[f] / --	28	54	2			
2/1-8	27,800				165	6.9	12 / 0.60	6.4 / 0.53	8.2 / 0.36	1.8 / 0.05	0 / 0.00	56 / 0.92	7.0 / 0.15	16 / 0.45	1.2 / 0.02	0.1 / 0.01	0.1	3.0	Fe 0.16	84[f] / 115[g]	23	56	10			
2/9-14	65,500				86.9	7.6	10 / 0.50	1.9 / 0.16	3.6 / 0.16	1.4 / 0.04	0 / 0.00	39 / 0.64	5.0 / 0.10	4.0 / 0.11	0.8 / 0.01	0.2 / 0.01	0.1	0.0	Fe 0.31	46[f] / 59[g]	19	33	1			
2/15-18	45,600				143	7.6	10 / 0.50	7.4 / 0.61	6.4 / 0.28	1.5 / 0.04	0 / 0.00	55 / 0.90	7.2 / 0.15	13 / 0.37	3.3 / 0.05	0.1 / 0.01	0.1	0.2	Fe 0.74	77[f] / 102[g]	20	55	10			
2/20, 22-23 25, 27-29	20,000				188	7.5	11 / 0.55	9.7 / 0.80	12 / 0.52	1.5 / 0.04	0 / 0.00	78 / 1.28	12 / 0.25	15 / 0.42	0.7 / 0.01	0.1 / 0.01	0.1	0.8	Fe 0.07	101[f] / 135[g]	27	67	3			
3/1-4	14,700				177	7.6	13 / 0.65	7.4 / 0.61	9.4 / 0.41	1.9 / 0.05	0 / 0.00	80 / 1.31	13 / 0.27	6.5 / 0.18	1.1 / 0.02	0.0 / 0.00	0.0	27	Fe 0.01	119[f] / 142[g]	24	63	0			
3/5-15, 17, 19, 21	45,000				108	7.8	8.0 / 0.40	5.1 / 0.42	5.3 / 0.23	1.5 / 0.04	0 / 0.00	51 / 0.84	9.0 / 0.19	2.8 / 0.08	1.1 / 0.02	0.0 / 0.00	0.1	19	Fe 0.10	81[f] / 111[g]	21	41	0			
3/22-24, 26, 28-30	27,600				121	7.6	8.4 / 0.42	6.1 / 0.50	5.7 / 0.25	1.5 / 0.04	0 / 0.00	57 / 0.93	9.0 / 0.19	3.2 / 0.09	0.5 / 0.01	0.1 / 0.01	0.0	20	Fe 0.03	83[f] / 126[g]	21	46	0			
4/1-6, 8-10	26,700				107	7.1	9.2 / 0.46	4.1 / 0.34	4.9 / 0.21	1.1 / 0.03	0 / 0.00	55 / 0.90	5.0 / 0.10	1.0 / 0.03	0.3 / 0.00	0.0 / 0.00	0.00	21	Fe 0.03	74[f] / 91[g]	20	40	0			
4/12-16, 18, 20	16,700				109	7.1	15 / 0.75	1.1 / 0.09	5.2 / 0.23	1.0 / 0.03	0 / 0.00	57 / 0.93	5.0 / 0.10	3.0 / 0.08	0.4 / 0.01	0.1 / 0.01	0.0	18	Fe 0.02	77[f] / 95[g]	21	42	0			
4/22, 24-26	12,600				142	7.3	15 / 0.75	3.8 / 0.31	9.0 / 0.39	1.1 / 0.03	0 / 0.00	65 / 1.07	11 / 0.23	7.0 / 0.20	0.3 / 0.00	0.1 / 0.01	0.1	21	Fe 0.01	100[f] / 111[g]	26	53	0			
4/28	17,800	57			181	7.4	14 / 0.70	7.8 / 0.64	13 / 0.57	1.3 / 0.03	0 / 0.00	73 / 1.20	19 / 0.40	12 / 0.34	0.7 / 0.01	0.4 / 0.02	0.0	23		127[f] / 144[g]	29	67	7			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT SACRAMENTO (STA. 15 continued)

Date and time sampled P.S.T.	Discharge in cfs Avg. M.D.	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										
4/29-30	19,600				154	7.2	11 / 0.55	6.4 / 0.53	10 / 0.44	1.4 / 0.04	0 / 0.00	69 / 1.13	13 / 0.27	6.5 / 0.18	0.5 / 0.01	0.2 / 0.01	0.1	18	Fe 0.06	101[f] / 121[g]	28	54	0			USGS
5/1-6, 8-10	16,500				175	7.9	14 / 0.70	6.6 / 0.54	12 / 0.52	1.4 / 0.04	0 / 0.00	76 / 1.25	12 / 0.25	12 / 0.34	0.7 / 0.01	0.1 / 0.01	0.1	22	Fe 0.01	118[f] / 114[g]	29	62	0			
5/11-13, 15, 18-20	15,500				180	7.5	14 / 0.70	7.1 / 0.58	13 / 0.57	1.5 / 0.04	0 / 0.00	82 / 1.34	12 / 0.25	11 / 0.31	0.2 / 0.00	0.1 / 0.01	0.1	22	Fe 0.01	121[f] / 118[g]	30	64	0			
5/21-25, 27, 31	15,100				194		14 / 0.70	7.5 / 0.62	14 / 0.61	1.6 / 0.04	0 / 0.00	84 / 1.38	14 / 0.29	12 / 0.34	1.1 / 0.02	0.2 / 0.01	0.1	24	Fe 0.01	130[f] / 120[g]	31	66	0			

Station discontinued 6/1/60, after this date see Sacramento River at Freeport.

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT SACRAMENTO (STA. 15)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Daily Mean																									USGS
1/11 0730	10,100	41	10.7	84	192	7.3	1.36[c]		14 / 0.61		0.0 / 0.00	82 / 1.34		9.5 / 0.27			0.1			125[e]	31	68	1	15	Maximum 230	
2/2 0730	16,600	50	10.2	90	139	7.3	1.08[c]		9.1 / 0.40		0.0 / 0.00	58 / 0.95		7.0 / 0.20			0.1			91[e]	27	54	6	70	Minimum 2.3	
3/1 0725	15,400	50	10.5	93	190	7.3	1.42[c]		11 / 0.48		0.0 / 0.00	84 / 1.38		9.8 / 0.28			0.1			124[e]	25	71	2	100	Median 23	
4/11 0730	22,800	57	9.3	89	102	7.3	0.82[c]		4.0 / 0.17		0.0 / 0.00	50 / 0.82		3.0 / 0.08			0.0			66[e]	17	41	0	45		
5/2 0615	16,800	60	9.0	90	160	7.3	11 / 0.55	6.0 / 0.49	11 / 0.48	2.1 / 0.05	0.0 / 0.00	68 / 1.11	13 / 0.27	7.2 / 0.20	0.3 / 0.00	0.1 / 0.01	0.0	19	Fe 0.15 PO_4 0.15 Al 0.19 Zn 0.02 [d]	103[f]	31	52	0	45		
6/	Discontinued																									

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT SNODGRASS SLOUGH (STA. 97)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[g]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million							equivalents per million												
1960																										
1/12 1130		46			224	7.7	17	7.1	12	1.6	0.0	92	7.2	11	0.0					144	27					USBR
2/11 1340		48			63	7.8	4.8	3.1	2.8	1.2	0.0	28	13	2.1	0.0					52	19					
3/15 1210		53			110	7.5	7.6	6.0	5.3	1.2	0.0	45	13	6.0	0.6					72	20					
4/11 1255		59			94	8.3	12	3.8	4.6	0.4	0.0	46	12	2.8	0.6					92	18					
5/12 1115		66			172	7.6	15	5.6	9.7	1.6	0.0	70	15	9.2	2.5					116	26					
6/15 ----		--			175	7.1	12	6.6	13	1.6	0.0	68	11	16	0.0					124	32					
7/14 0940		72			170	7.5	15	6.6	12	2.0	0.0	72	10	11	0.0					140	27					
8/15 1300		67			179	7.8	12	7.7	13	1.6	0.0	65	22	16	1.2					140	30					
9/12 1325		--			236	7.5	19	8.7	17	2.0	0.0	97	16	11	0.0					176	31					
10/10 1250		68			223	7.7	17	8.8	14	2.0	0.0	84	12	9.2	0.6					168	28					
11/14 1300		55			173	7.2	12	7.2	9.4	2.0	0.0	73	6.7	6.4	3.1					148	25					
12/13 1350		49			168	7.4	13	7.0	9.9	2.3	0.0	71	14	9.2	0.6					130	25					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT TOLAND LANDING (STA. 15a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[g]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										
3/14 1230		53			120															84						USBR
4/11 1120		61			110															108						
5/12 1010		63			205															140						
6/15 1410		73			247															160						
7/14 1130		69			2031															1216						
8/15 1130		65			2171															1192						
9/12 1130		--			2065															1144						
10/13 1130		--			1143															700						
11/14 1110		58			247				18					22						212	32					
12/13 1220		49			216				17					19						166	34					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO SLOUGH NEAR KNIGHTS LANDING (STA. 14a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/7 1140	172	42	11.8	93	372	7.7	2.80[c]		26 / 1.13		0.0 / 0.00	190 / 3.11		22 / 0.62			0.1			223[e]	29	140	0	8	Median 23.	
2/16 1020		51	9.2	82	132	7.1	1.04[c]		6.0 / 0.26		0.0 / 0.00	58 / 0.95		5.6 / 0.16			0.1			79[e]	20	52	4	600	Maximum 2,400.	
3/4 1255	401	53	9.6	88	438	7.5	3.40[c]		29 / 1.26		0.0 / 0.00	221 / 3.62		31 / 0.87			0.1			263[e]	27	170	0	300	Minimum 1.3	
4/4 1240	530	65	8.7	92	226	7.5	1.77[c]		12 / 0.52		0.0 / 0.00	119 / 1.95		9.2 / 0.26			0.0			136[e]	23	89	0	40		
5/9 1630	595	74	7.9	92	314	7.7	24 / 1.20	17 / 1.40	18 / 0.78	2.2 / 0.06	0.0 / 0.00	168 / 2.75	13 / 0.27	18 / 0.51	0.9 / 0.01	0.2 / 0.01	0.0	21	Fe 0.02 Al 0.35 PO_4 0.30[d]	197[f]	23	130	0	70		
6/13 0900	725	82	5.7	72	375	7.7	2.86[c]		25 / 1.09		0.0 / 0.00	202 / 3.31		23 / 0.65			0.1			225[e]	28	143	0	35		
7/8 1045	711	80	6.2	76	399	7.7	3.20[c]		25 / 1.09		0.0 / 0.00	228 / 3.74		11 / 0.31			0.0			239[e]	25	160	0	60		
8/11 1430	800	83	7.0	89	431	7.7	3.38[c]		27 / 1.17		0.0 / 0.00	246 / 4.03		18 / 0.51			0.1			258[e]	26	169	0	70		
9/15 1100	531	74	7.0	81	385	7.7	36 / 1.80	15 / 1.24	31 / 1.35	1.7 / 0.04	0.0 / 0.00	232 / 3.80	8.8 / 0.18	14 / 0.39	0.3 / 0.00	0.1 / 0.01	0.1	29	Fe 0.06 Al 0.11 PO_4 0.40 Cu 0.02 As 0.01[d]	250[f]	30	152	0	30		
10/3 1440	154	71	8.1	91	399	7.7	3.14[c]		23 / 1.00		0.0 / 0.00	203 / 3.33		24 / 0.68			0.2			239[e]	24	157	0	40		
11/4 1015		60	7.2	72	378	7.5	2.98[c]		25 / 1.09		0.0 / 0.00	200 / 3.28		19 / 0.54			0.2			227[e]	27	149	0	35		
12/9 0825	3,040	43	10.0	80	154	7.3	1.23[c]		8.6 / 0.37		0.0 / 0.00	77 / 1.26		5.0 / 0.14			0.1			92[e]	23	62	0	300		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SALT SLOUGH AT SAN LUIS RANCH (STA. 92a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/6 1530	66	46	10.2	85	2,390	7.3	9.08/9.08[c]		342/14.88		0.0/0.00	267/4.38	370/7.70	418/11.79			1.7			1435[e]	62	454	235	35		
2/5 0805	74	52	6.1	55	2,190	7.3	9.44/9.44[c]		338/14.70		0.0/0.00	234/3.84	460/9.58	408/11.51			2.2			1315[e]	61	472	280	60		
3/4 1105	77	58	7.0	68	2,180	7.7	8.60/8.60[c]		296/12.88		0.0/0.00	234/3.84	354/7.37	372/10.49			1.9			1310[e]	60	430	238	100		
4/14 0915	88	62	5.3	54	1,160	7.3	5.36/5.36[c]		139/6.05		0.00/0.00	162/2.66	140/2.91	202/5.70			0.6			696[e]	53	268	135	100		
5/4 1445	65	68	5.1	56	1,470	7.3	66/3.29	37/3.01	198/8.61	6.8/0.17	0.0/0.00	176/2.88	234/4.87	265/0.17	4.0/0.06	0.3/0.02	1.2	25	Fe 0.01 Al 0.35[d] PO_4 0.55	924[f]	57	315	171	70		
6/9 0920	58	68	5.1	56	963	7.1	4.68/4.68[c]		113/4.92		0.0/0.00	160/2.62	119/2.48	160/4.51			0.7			579[e]	52	230	90	100		
7/13 1350	75	80	5.2	64	991	7.3	4.42/4.42[c]		148/6.44		0.0/0.00	175/2.87	136/2.83	180/5.08			0.9			596[e]	59	221	77	50		
8/3 1850	65	83	6.5	82	1,030	7.5	4.40/4.40[c]		127/5.52		0.0/0.00	170/2.79	108/2.25	174/4.91			0.6			618[e]	56	220	81	30		
9/7 1325	68	76	6.3	74	1,050	7.3	47/2.35	27/2.25	142/6.18	5.4/0.14	0.0/0.00	169/2.77	110/2.29	210/5.92	1.1/0.02	0.2/0.01	0.4	20	Fe 0.06 Al 0.19[d] PO_4 0.70 Zn 0.06	646[f]	57	230	91	60		
10/5 1705	82	73	5.8	66	968	7.3	4.20/4.20[c]		99/4.31		0.0/0.00	157/2.57		174/4.91			0.3			582[e]	51	210	81	60		
11/9 1540	39.0	62	4.0	41	1,990	7.1	7.22/7.22[c]		258/11.22		0.0/0.00	227/3.72		334/9.42			0.9			1195[e]	61	361	175	40		
12/15 0830	58	49	4.9	43	2,020	7.2	7.70/7.70[c]		282/12.27		0.0/0.00	237/3.88	286/5.95	365/10.29			0.7			1210[e]	61	385	191	55		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT ANTIOCH (STA. 28)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Tidal																									USGS
1/11 1430		46	10.0	84	2,910	7.3	6.76[c]		525 / 22.84		0.0 / 0.00	100 / 1.64		795 / 22.42			0.2			1,601[e]	77	338	256	30	Maximum 2,400 Minimum 6.2 Median 23.	
2/2 1330		52	9.6	87	573	7.3	2.56[c]		61 / 2.65		0.0 / 0.00	96 / 1.57		96 / 2.71			0.2			315[e]	51	128	49	50		
3/1 1315		53	9.3	85	383	7.2	2.12[c]		35 / 1.52		0.0 / 0.00	76 / 1.25		54 / 1.52			0.1			211[e]	42	106	44	75		
4/11 1405		63	8.9	92	180	7.3	1.16[c]		13 / 0.57		0.0 / 0.00	60 / 0.98		3.5 / 0.10			0.1			99[e]	33	58	9	85		
5/2 1115		62	8.2	83	375	7.3	13 / 0.65	8.6 / 0.71	49 / 2.13	3.1 / 0.08	0.0 / 0.00	62 / 1.02	22 / 0.46	73 / 2.06	0.2 / 0.00	0.0 / 0.00	0.2	15	Fe 0.04 PO_4 0.05 Al 0.34 Zn 0.05 [d]	215[f]	60	68	17	50		
6/6 1215		71	7.8	88	455	7.5	1.72[c]		52 / 2.26		0.0 / 0.00	81 / 1.33		83 / 2.34			0.1			250[e]	57	86	20	50		
7/11 1145		69	7.8	86	2,910	7.5	6.56[c]		417 / 18.14		0.0 / 0.00	86 / 1.41		725 / 20.44			0.3			1,601[e]	73	328	257	50		
8/1 1630		75	7.6	89	4,240	7.7	9.28[c]		730 / 31.76		0.0 / 0.00	88 / 1.44		1,190 / 33.56			0.3			2,332[e]	77	464	392	35		
9/5 1145		69	7.5	82	3,210	7.3	34 / 1.70	67 / 5.50	483 / 21.01	15 / 0.38	0.0 / 0.00	94 / 1.54	128 / 2.66	897 / 25.30	0.6 / 0.01	0.4 / 0.02	0.3	11	Fe 0.07 PO_4 0.15 Al 0.23 Zn 0.14 [d]	1,680[f]	73	360	283	30		
10/3 1420		67	8.0	86	2,190	7.5	5.04[c]		313 / 13.62		0.0 / 0.00	102 / 1.67		575 / 16.22			0.2			1,205[e]	73	252	168	150		
11/7 1250		61	7.5	75	1,620	7.3	4.08[c]		216 / 9.40		0.0 / 0.00	95 / 1.56		425 / 11.98			0.2			891[e]	70	204	126	27		
12/12 1255		50	9.2	81	259	7.1	1.58[c]		25 / 1.09		0.0 / 0.00	114 / 1.87		29 / 0.82			0.1			142[e]	41	79	0	25		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR BIOLA (STA. 24a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Average Mean Daily																									USGS
1/1-6					116	7.0	13/0.65	1.8/0.15	10/0.44		0.0/0.00	57/0.93								88	35	40	0			
1/7-14					127	6.9	15/0.75	0.4/0.03	11/0.48		0.0/0.00	57/0.93								83	38	39	0			
1/15-31					115	7.2	14/0.70	0.5/0.04	10/0.44		0.0/0.00	52/0.85								73	37	37	0			
2/1-17					116	7.2	13/0.65	1.1/0.09	10/0.44		0.0/0.00	52/0.85								74	37	37	0			
2/18-27					123	7.2	14/0.70	1.2/0.10	10/0.44		0.0/0.00	52/0.85								81	35	40	0			
2/28-29					81.0	7.1	9.2/0.46	0.0/0.00	6.4/0.28		0.0/0.00	30/0.49								106	38	23	0			
3/1-10					81.2	7.0	6.8/0.34	3.9/0.32	6.6/0.29		0.0/0.00	33/0.34								63	31	33	6			
3/11-20					85.6	7.6	6.8/0.34	4.6/0.38	7.6/0.33		0.0/0.00	35/0.57								60	31	36	7			
3/21-31					83.2	7.0	5.6/0.28	5.6/0.46	7.6/0.33		0.0/0.00	33/0.54								58	31	37	10			
4/1-9					82.0	7.4	5.6/0.28	1.9/0.16	7.2/0.31		0.0/0.00	38/0.62								54		22				
4/10-21					77.0	7.4	5.2/0.26	1.9/0.16	6.6/0.29		0.0/0.00	35/0.57								47		21				
4/22-30					70.9	7.3	5.6/0.28	2.9/0.24	5.7/0.25		0.0/0.00	42/0.69								53		28				
5/1-11					83.4	6.9	7.2/0.36	1.5/0.12	7.0/0.30		0.0/0.00	34/0.56								60	38	24	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR BIOLA (STA. 24a) (continued)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Average Mean Daily																									
5/12-20					77.3	6.8	5.6 / 0.28	1.5 / 0.12	8.0 / 0.35		0.0 / 0.00	32 / 0.52								66	47	20	0			
5/21-31					74.4	6.8	6.0 / 0.30	1.2 / 0.10	8.0 / 0.35		0.0 / 0.00	29 / 0.48								64	47	20	0			
6/1-16					72.9	6.8	5.0 / 0.25	1.5 / 0.12	6.8 / 0.30		0.0 / 0.00	31 / 0.51								46	45	18	0			
6/17-30					69.4	6.9	5.4 / 0.27	1.3 / 0.11	6.4 / 0.28		0.0 / 0.00	30 / 0.49								43	42	19	0			
7/1-9					72.0	6.4	5.2 / 0.26	1.2 / 0.10	7.1 / 0.31		0.0 / 0.00	21 / 0.34								62	46	18	1			
7/12-21					74.7	6.4	6.0 / 0.35	0.6 / 0.05	7.1 / 0.31		0.0 / 0.00	19 / 0.31								65	44	20	4			
7/22-30					72.4	6.4	4.8 / 0.24	1.5 / 0.12	6.9 / 0.30		0.0 / 0.00	24 / 0.39								60	45	18	0			
8/1-10					75.3	6.3	4.8 / 0.24	1.5 / 0.12	7.2 / 0.31		0.0 / 0.00	23 / 0.38								56	46	18	0			
8/11-19					71.7	6.3	4.8 / 0.24	1.5 / 0.12	7.5 / 0.33		0.0 / 0.00	21 / 0.34								62	48	18	1			
8/20-21, 25-31					77.1	6.4	5.6 / 0.28	1.5 / 0.12	7.9 / 0.34		0.0 / 0.00	24 / 0.39								63	46	20	0			
9/1-10					76.3	6.7	6.4 / 0.32	1.0 / 0.08	7.5 / 0.33		0.0 / 0.00	24 / 0.39								50	45	20	0			
9/11-20					75.6	6.7	5.6 / 0.28	1.5 / 0.12	7.5 / 0.33		0.0 / 0.00	28 / 0.46								73	45	20	0			
9/21-30					73.4	6.6	5.6 / 0.28	1.5 / 0.12	7.1 / 0.31		0.0 / 0.00	22 / 0.36								46	44	20	2			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR BIOLA (STA. 24a) (continued)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1960	Average Mean Daily																									
10/1-10					74.4	6.8	4.8/0.24	1.9/0.16	7.3/0.32		0.0/0.00	25/0.41								59	44	20	0			
10/11-20					79.6	6.8	6.4/0.32	1.0/0.08	7.3/0.32		0.0/0.00	28/0.46								60	44	20	0			
10/21-30					78.0	6.7	5.6/0.28	1.5/0.12	7.3/0.32		0.0/0.00	29/0.48								62	44	20	0			
11/1-7					77.8	6.4	5.6/0.28	2.4/0.20	7.6/0.33		0.0/0.00	26/0.43								55	41	24	3			
11/8-15					82.0	6.5	6.0/0.30	2.4/0.20	7.6/0.33		0.0/0.00	30/0.49								63	40	25	0			
11/16-23					84.6	6.5	6.0/0.30	3.4/0.28	7.3/0.32		0.0/0.00	32/0.52								65	35	29	3			
11/25-30					105	6.7	8.0/0.40	3.4/0.28	9.3/0.40		0.0/0.00	46/0.75								76	37	34	0			
12/1-3					102	6.6	8.0/0.40	2.4/0.20	8.6/0.37		0.0/0.00	42/0.69								80	38	30	0			
12/4-18					66.5	6.5	6.4/0.32	0.5/0.04	5.6/0.24		0.0/0.00	24/0.39								49	40	18	0			
12/19-31					84.8	6.9	8.0/0.40	0.5/0.04	7.7/0.33		0.0/0.00	34/0.56								54	43	22	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT BRANDT BRIDGE (STA. 101a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million													Total dissolved solids in ppm[g]	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
			ppm	%Sat			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents			Total ppm	N.C. ppm			
1960																										
2/15 1020		53			453				52					65						278	50					USBR
5/12 1030		73			757				75					121						424	43					
8/17 1120		77			643				59					95						312	40					
11/14 1325		58			709				74					129						496	45					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT CROWS LANDING BRIDGE (STA. NO. 26b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USBR
1/14 1310		47			1,690				223					224						1024	57					
2/11 1200		54			971				129					136						604	58					
3/16 1140		58			2,019				265					334						1268	57					
4/19 1630		--			1,185				150					224						836	55					
5/12 1305		73			1,105				131					173						708	52					
6/15 1230		78			1,367				174					231						800	55					
7/14 1215		76			1,093				129					185						744	51					
8/15 1300		79			1,102				109					178						636	43					
9/16 0850		--			1,270				150					212						804	51					
10/12 1300		--			1,297				136					200						792	46					
11/14 1200		60			1,157				131					178						700	49					
12/12 1150		48			1,335				161					224						888	52					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE (STA. 25c)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/6 1645	81	42			2,460	7.5	9.70[c]		355 / 15.44		0.0 / 0.00	262 / 4.29	286 / 5.95	470 / 13.25			1.2			1440[e]	61	485	270	30		
2/5 1030	280	52	9.2	83	1,060	7.5	4.80[c]		137 / 5.96		0.0 / 0.00	164 / 2.69		165 / 4.65			0.6			618[e]	55	240	106	150		
3/14 1536	117	58	12.1	118	2,480	7.9	10.28[c]		334 / 14.53		0.0 / 0.00	228 / 3.74		482 / 13.59			1.8			1450[e]	59	514	327	20		
4/14 1030	147	64	8.8	92	1,410	7.7	5.90[c]		177 / 7.70		0.0 / 0.00	187 / 3.06	156 / 3.25	263 / 7.42			0.5			822[e]	57	295	142	110		
5/5 0955	165	64	8.7	91	1,330	7.7	62 / 3.09	34 / 2.79	163 / 7.09	6.2 / 0.16	0.0 / 0.00	175 / 2.87	162 / 3.37	243 / 6.85	1.2 / 0.02	0.3 / 0.02	0.7	20	Fe 0.08 PO4 0.25 Al 0.19 [d]	778[f]	54	294	150	25		
6/9 1030	117	75	8.7	102	1,420	7.7	5.97[c]		180 / 7.83		0.0 / 0.00	193 / 3.16	164 / 3.41	262 / 7.39			0.5			828[e]	57	298	140	42		
7/14 0840	80	76	7.3	86	1,210	7.9	5.14[c]		144 / 6.26		0.0 / 0.00	192 / 3.15	151 / 3.14	215 / 6.06			0.6			705[e]	55	257	100	38		
8/4 1130	74	75	8.2	96	1,260	7.9	5.24[c]		170 / 7.40		0.0 / 0.00	191 / 3.13	133 / 2.77	238 / 6.71			0.4			735[e]	59	262	105	50		
9/7 1425	58	80	12.4	152	1,490	8.1	61 / 3.04	31 / 2.56	222 / 9.66	3.6 / 0.09	3 / 0.10	209 / 3.43	151 / 3.14	290 / 8.18	0.5 / 0.01	0.5 / 0.03	0.4	15	Fe 0.05 Al 0.20 PO4 0.35 Tot. Alk. 215 [d]	881[f]	63	280	104	20		
10/6 1025	55	72	7.4	84	1,440	7.7	5.36[c]		171 / 7.44		0.0 / 0.00	179 / 2.93		270 / 7.61			0.4			840[e]	58	268	121	60	Median 6.2	
11/10 1120	24.5	57	7.0	67	2,440	7.3	9.22[c]		310 / 13.48		0.0 / 0.00	228 / 3.74		520 / 14.66			0.8			1420[e]	59	461	274	23	Max. 230	
12/15 0950	65	49	10.0	87	2,310	7.5	9.40[c]		326 / 14.18		6 / 0.20	227 / 3.72		440 / 12.41			1.1		Tot. Alk. 239	1350[e]	60	470	274	30	Min. 2.3	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT FRIANT (STA. 24)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/5 1210	32	49	10.8	94	49.3	7.1	0.34[c]		3.8 / 0.17		0.0 / 0.00	16 / 0.26		3.0 / 0.08			0.0			40[e]	33	17	4	15		
2/3 1030		48	8.9	76	49.1	6.8	0.28[c]		3.6 / 0.16		0.0 / 0.00	15 / 0.25		5.2 / 0.15			0.0			40[e]	35	14	2	25		
3/2 1445	108	52	12.1	110	55.4	7.2	0.42[c]		4.2 / 0.18		0.0 / 0.00	22 / 0.36		5.5 / 0.16			0.1			44[e]	30	21	3	20		
4/5 1055	129	52	12.1	118	55.4	7.1	0.40[c]		4.0 / 0.17		0.0 / 0.00	22 / 0.36		5.5 / 0.16			0.1			44[e]	30	20	2	8		
5/4 1620	122	56	11.5	109	56.6	7.3	4.4 / 0.22	1.9 / 0.16	4.5 / 0.20	1.0 / 0.03	0.0 / 0.00	25 / 0.41	4.0 / 0.08	3.5 / 0.10	0.2 / 0.00	0.1 / 0.01	0.1	11	Fe 0.09 Al 0.08[d] PO_4 0.05 Pb 0.01	43[f]	33	19	0	3		
6/1 1505	166	57	10.2	98	58.5	7.1	0.32[c]		4.9 / 0.21		0.0 / 0.00	21 / 0.34		5.6 / 0.16			0.1			47[e]	40	16	0	18		
7/6 1025	234	55	11.7	110	59.4	7.3	0.33[c]		4.3 / 0.19		0.0 / 0.00	24 / 0.39		6.0 / 0.17			0.1			48[e]	37	16	0	4		
8/10 0615	214	50	10.5	92	58.5	6.9	0.32[c]		5.2 / 0.23		0.0 / 0.00	22 / 0.36		6.0 / 0.17			0.0			47[e]	42	16	0	10		
9/6 1745	91	55	11.5	108	57.1	7.2	5.6 / 0.28	0.2 / 0.02	5.2 / 0.23	0.8 / 0.02	0.0 / 0.00	22 / 0.36	0.0 / 0.00	5.2 / 0.15	0.3 / 0.00	0.1 / 0.01	0.0	10	Fe 0.01 Al 0.06[d] PO_4 0.05	38[f]	42	15	0	8		
10/4 1320	146	57	12.7	122	55.5	7.5	0.34[c]		4.6 / 0.20		0.0 / 0.00	20 / 0.33		5.0 / 0.14			0.1			45[e]	37	17	1	15	Median 62	
11/2 1500	125	53	10.8	99	52.8	7.3	0.30[c]		4.2 / 0.18		0.0 / 0.00	18 / 0.30		4.8 / 0.14			0.1			42[e]	38	15	0	3	Max. 7000	
12/14 1215	94	53	11.0	100	55.7	6.9	0.38[c]		5.0 / 0.22		0.0 / 0.00	24 / 0.39		4.0 / 0.11			0.0			45[e]	37	19	0	5	Min. 0.62	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT GARWOOD BRIDGE (STA. 101)

Date and time samp'ed P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1960	Tidal																									USGS
1/8 1030		44	12.4	100	854	7.7	3.72[c]		100 / 4.35		0.0 / 0.00	142 / 2.33		158 / 4.46			0.3			483[e]	54	186	70	15	Maximum >24,000 Minimum 0.62 Median 1,300	
2/16 1305		54	7.8	72	446	7.3	2.08[c]		46 / 2.00		0.0 / 0.00	94 / 1.54		60 / 1.69			0.1			252[e]	49	104	27	90		
3/15 1420		58	10.6	103	1,000	7.9	4.18[c]		128 / 5.57		0.0 / 0.00	166 / 2.72		179 / 5.05			0.5			566[e]	57	209	73	15		
4/15 1115		65	9.1	96	872	7.9	3.86[c]		101 / 4.39		0.0 / 0.00	152 / 2.49		152 / 4.29			0.4			494[e]	53	193	68	20		
5/6 1100		68	12.0	130	745	8.1	39 / 1.95	20 / 1.65	86 / 3.74	7.8 / 0.20	0.0 / 0.00	178 / 2.92	51 / 1.06	118 / 3.33	3.1 / 0.05	0.2 / 0.01	0.4	16	Fe 0.03 Zn 0.01[d] PO_4 0.85 Al 0.02	430[f]	50	180	34	70		
6/10 0845		74	4.4	51	705	7.3	3.08[c]		80 / 3.48		0.0 / 0.00	142 / 2.33		128 / 3.61			0.3			399[e]	53	154	38	45		
7/15 0845		77	7.4	88	497	7.7	2.68[c]		46 / 2.00		0.0 / 0.00	124 / 2.03		79 / 2.23			0.1			281[e]	43	134	32	20		
8/8 0825		78	5.0	60	487	7.3	2.28[c]		54 / 2.35		0.0 / 0.00	108 / 1.77		79 / 2.23			0.1			276[e]	51	114	25	30		
9/5 1725		75	6.2	72	653	7.7	32 / 1.60	14 / 1.14	76 / 3.31	5.6 / 0.14	0.0 / 0.00	164 / 2.69	31 / 0.65	108 / 3.05	2.8 / 0.05	0.0 / 0.00	0.2	14	Al 0.19 Zn 0.02[d] PO_4 1.90	365[f]	53	137	3	35		
10/3 1500		71	10.3	116	703	7.9	3.05[c]		78 / 3.39		0.0 / 0.00	186 / 3.05		105 / 2.96			0.3			398[e]	53	153	0	20		
11/1 1535		62	12.2	124	961	8.1	4.40[c]		118 / 5.13		0.0 / 0.00	169 / 2.77		180 / 5.08			0.3			544[e]	54	220	81	15		
12/16 1145		50	9.8	86	670	7.5	3.00[c]		77 / 3.35		0.0 / 0.00	118 / 1.93		112 / 3.16			0.0			379[e]	53	150	53	8		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR GRAYSON (STA. 26)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/15 1430	585	49	11.2	97	1,510	8.2	6.12[c]		219 / 9.53		0.0 / 0.00	250 / 4.10		250 / 7.05			1.6			896[e]	61	306	101	15		
2/9 1030	760	56	8.0	76	1,280	7.7	5.14[c]		155 / 6.74		0.0 / 0.00	207 / 3.39		205 / 5.78			0.7			760[e]	58	257	87	95		
3/11 1350	380	61	12.0	120	1,840	8.2	8.04[c]		247 / 10.74		0.0 / 0.00	232 / 3.80		306 / 8.63			1.1			1090[e]	57	402	212	10		
4/7 1500	310	74	15.0	174	1,430	8.6	6.56[c]		180 / 7.83		0.0 / 0.00	217 / 3.56		248 / 6.99			0.7			850[e]	54	328	150	50		
5/10 1335	350	76	14.1	166	1,240	8.6	58 / 2.89	31 / 2.51	173 / 7.53	5.0 / 0.13	0.0 / 0.00	202 / 3.31	157 / 3.27	213 / 6.01	1.0 / 0.02	0.2 / 0.01	0.4	14	Fe 0.04 PO_4 0.55[d] Al 0.10 Cu 0.04	753[f]	58	270	104	27		
6/10 1410	215	80	12.4	152	1,270	8.5	5.90[c]		163 / 7.09		0.0 / 0.00	226 / 3.70		248 / 6.99			0.5			754[e]	55	295	110	30		
7/7 1345	160	80	12.0	148	1,250	8.6	5.80[c]		144 / 6.26		0.0 / 0.00	233 / 3.82		210 / 5.92			0.5			742[e]	52	290	99	9		
8/9 1300	215	77	10.8	129	1,100	8.5	5.08[c]		138 / 6.00		0.0 / 0.00	220 / 3.61		191 / 5.39			0.3			653[e]	54	254	74	25		
9/27 1450	245	72	11.2	128	1,540	8.6	62 / 3.09	34 / 2.83	170 / 7.40	4.0 / 0.10	0.0 / 0.00	218 / 3.57	166 / 3.46	238 / 6.71	3.8 / 0.06	0.1 / 0.01	0.5	22	Al 0.19 PO_4 0.55[d]	807[f]	55	296	117	40		
10/10 1420	255	60	10.8	108	1,640	8.3	6.57[c]		185 / 8.05		0.0 / 0.00	235 / 3.85		270 / 7.61			0.6			974[e]	55	328	135	25	Median 62	
11/11 1530	315	59	7.6	75	1,340	7.8	5.44[c]		182 / 7.92		0.0 / 0.00	222 / 3.64		239 / 6.74			0.5			795[e]	59	272	90	15	Max. 7000	
12/14 1450	350	52	8.1	73	1,410	7.9	6.04[c]		185 / 8.05		0.0 / 0.00	266 / 4.36		225 / 6.34			0.6			836[e]	57	302	84	15	Min. 1.3	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT HEAD OF TEMPLE SLOUGH (STA. NO. 25a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
1960																										USBR
1/15 1030		45			939	8.2	57	14	112	0.4	0.0	145	141	126	0.0					616	55					
2/11 1415		58			790	8.1	36	19	93	4.7	0.0	124	105	114	1.2					488	54					
3/16 1430		60			1,006	8.1	52	25	120	5.1	0.0	120	164	144	5.0					660	52					
4/13 1550		—			389	7.9	23	8.7	40	2.3	0.0	71	49	47	0.6					268	48					
5/12 1545		75			378	7.4	20	10	41	3.5	0.0	74	38	50	2.5					250	48					
6/15 1530		83			252	7.6	15	9.9	21	2.0	0.0	75	33	29	0.6					174	36					
7/14 1545		—			361	8.1	22	8.1	33	2.0	---	79	41	45	0.6					220	44					
8/15 1600		79			606	7.8	22	15	65	3.9	0.0	83	47	114	1.2					360	54					
9/15 1600		—			693	7.6	21	16	80	4.3	0.0	84	42	134	1.9					392	58					
10/12 1600		67			627	7.5	26	17	63	3.5	0.0	102	48	100	0.6					408	50					
11/14 1500		58			773	7.6	31	20	80	3.1	0.0	111	66	129	1.2					484	52					
12/12 1425		48			735	8.1	31	22	79	2.3	0.0	125	70	126	0.1					470	50					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT HILLS FERRY BRIDGE (STA. 25b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/7 0945	250	42	11.2	89	2,960	7.7	11.20[c]		388 / 16.88		0.0 / 0.00	286 / 4.69	428 / 8.91	490 / 13.82			1.5			1681[e]	60	560	225	15		
2/5 1150	612	52	9.1	82	1,410	7.6	6.00[c]		192 / 8.35		0.0 / 0.00	206 / 3.38	238 / 4.96	165 / 4.65			1.5			801[e]	58	300	131	150		
3/4 1445	384	60	11.5	115	1,680	8.0	6.84[c]		225 / 9.79		0.0 / 0.00	210 / 3.44	266 / 5.54	280 / 7.90			1.1			954[e]	59	342	170	30		
4/14 1225	268	65	10.5	111	1,250	8.1	5.22[c]		165 / 7.18		0.0 / 0.00	189 / 3.10	161 / 3.35	214 / 6.03			0.5			710[e]	58	261	106	100		
5/12* 1500	270	80	9.0	111	364	7.8	22 / 1.10	8.9 / 0.73	40 / 1.74	3.3 / 0.08	0.0 / 0.00	143 / 2.34	16 / 0.33	33 / 0.93	2.3 / 0.04	0.2 / 0.01	0.1	27	Fe 0.01 Cu 0.01 Al 0.06 Zn 0.01 PO_4 0.65 [d]	223[f]	48	92	0	15		
6/9 1210	244	77	11.9	142	1,310	8.1	5.42[c]		172 / 7.48		0.0 / 0.00	186 / 3.05	178 / 3.35	223 / 6.29			0.7			744[e]	58	271	118	32		
7/14 0945	158	75	8.0	94	1,260	7.9	5.36[c]		148 / 6.44		0.0 / 0.00	206 / 3.38	161 / 3.71	219 / 6.18			0.6			715[e]	55	268	99	27		
8/4 1355	165	80	11.9	146	1,130	8.1	4.68[c]		153 / 6.66		0.0 / 0.00	178 / 2.92	120 / 2.50	222 / 6.26			0.3			642[e]	59	234	88	40		
9/8 0750	132	70	6.3	70	1,550	7.9	60 / 2.99	32 / 2.61	232 / 10.09	3.2 / 0.08	0.0 / 0.00	209 / 3.43	182 / 3.79	290 / 8.18	0.9 / 0.01	0.3 / 0.02	0.6	18	Fe 0.03 PO_4 0.95 Al 0.20 [d]	922[f]	64	280	109	25		
10/6 0920	117	70	7.2	80	1,530	7.7	6.06[c]		183 / 7.96		0.0 / 0.00	168 / 2.75		262 / 7.39			0.5			870[e]	57	303	165	60	Median 13	
11/10 1220	186	52	7.7	70	1,860	7.5	7.28[c]		228 / 9.92		0.0 / 0.00	238 / 3.90		325 / 9.16			0.8			1056[e]	58	364	169	31	Max. 1300	
12/15 1110	215	49	9.6	84	2,310	7.7	9.20[c]		338 / 14.70		0.0 / 0.00	251 / 4.11		420 / 11.84			1.1			1310[e]	62	460	254	30	Min. 0.23	

*Sample at T.B.--Merced R. water.

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT JERSEY POINT (STA. 26b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[g]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										
3/15 1410		54			261															152						USBR
4/13 1300		63			163															148						
5/10 1310		--			164															120						
6/15 1230		--			413															248						
7/14 1230		70			966															568						
8/15 1430		70			2395															1360						
9/12 1055		72			996															572						
10/10 1300		--			552															404						

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE (STA. 26a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/15 1510	1510	50	10.0	88	812	8.0	3.32[c]		106 / 4.61		0.0 / 0.00	135 / 2.21		135 / 3.81			0.7			453[e]	58	166	55	10		
2/9 1000	1355	55	7.8	73	942	7.5	3.80[c]		106 / 4.61		0.0 / 0.00	149 / 2.44		175 / 2.94			0.6			525[e]	55	190	68	50		
3/11 1250	700	61	8.0	80	942	7.8	4.14[c]		111 / 4.83		0.0 / 0.00	134 / 2.20		190 / 5.36			0.4			525[e]	54	207	97	6		
4/7 1415	400	73	14.5	166	1,280	8.5	5.76[c]		153 / 6.66		0.0 / 0.00	186 / 3.05		280 / 7.90			0.4			715[e]	54	288	135	60		
5/10 1300	470	76	15.7	184	1,220	8.5	64 / 3.19	26 / 2.15	161 / 7.00	7.8 / 0.20	0.0 / 0.00	188 / 3.08	95 / 1.98	250 / 7.05	2.3 / 0.04	0.2 / 0.01	0.3	28	Fe 0.02 Cu 0.01[d] Al 0.12 Zn 0.01 PO_4 0.75	728[f]	56	267	113	41		
6/10 1325	300	80	7.5	92	1,210	8.0	5.50[c]		135 / 5.87		0.0 / 0.00	181 / 2.97		285 / 8.04			0.4			675[e]	52	275	127	40		
7/7 1440	250	81	9.9	123	1,230	8.5	5.32[c]		135 / 5.87		0.0 / 0.00	192 / 3.15		278 / 7.84			0.4			686[e]	52	266	109	49		
8/9 1120	310	77	8.7	104	1,200	8.2	5.32[c]		150 / 6.52		0.0 / 0.00	190 / 3.11		246 / 6.94			0.4			670[e]	55	266	110	60		
9/27 1405	415	72	11.9	135	1,520	8.5	67 / 3.34	33 / 2.68	163 / 7.09	5.6 / 0.14	0.0 / 0.00	208 / 3.41	116 / 2.42	269 / 7.59	3.2 / 0.05	0.1 / 0.01	0.4	29	Al 0.16 PO_4 0.55[d]	788[f]	54	301	130	25		
10/10 1505	495	60	10.7	107	1,360	8.5	5.75[c]		155 / 6.74		0.0 / 0.00	211 / 3.46		260 / 7.33			0.5			759[e]	54	288	115	35	Median 230	
11/11 1615	950	58	7.3	71	808	7.6	3.58[c]		90 / 3.92		0.0 / 0.00	128 / 2.10		144 / 4.06			0.2			451[e]	52	179	74	5	Max. 7000	
12/14 1530	1120	51	8.7	78	770	7.7	3.48[c]		93 / 4.05		0.0 / 0.00	189 / 3.10		132 / 3.72			0.3			429[e]	54	174	19	15	Min. 2.3	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR MENDOTA (STA. 25)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/6 1415	1	48	18.2	156	723	8.1	3.28[c]		82 / 3.57		0.0 / 0.00	130 / 2.13		122 / 3.44			0.2			417[e]	52	164	57	10		
2/4 1730	13	56	11.6	110	926	7.7	4.12[c]		101 / 4.39		0.0 / 0.00	144 / 2.36		160 / 4.51			0.5			535[e]	52	206	88	15		
3/4 0830	174	52	10.2	92	952	7.7	4.14[c]		114 / 4.96		0.0 / 0.00	150 / 2.46		152 / 4.29			0.6			550[e]	55	207	84	50		
4/14 0740	229	61	8.9	90	315	7.3	1.72[c]		27 / 1.17		0.0 / 0.00	73 / 1.20		38 / 1.07			0.2			182[e]	40	86	26	100		
5/5 0800	244	62	9.0	92	570	7.5	32 / 1.60	15 / 1.20	59 / 2.57	4.2 / 0.11	0.0 / 0.00	108 / 1.77	28 / 0.58	110 / 3.10	0.9 / 0.01	0.2 / 0.01	0.3	16	Fe 0.14 As 0.01[d] Al 0.15 PO_4 0.20	319[f]	47	140	51	15		
6/9 0740	402	76	8.1	96	247	7.3	1.46[c]		23 / 1.00		0.0 / 0.00	78 / 1.28		24 / 0.68			0.1			143[e]	41	73	9	85		
7/14 0700	420	73	7.6	87	318	7.3	1.68[c]		33 / 1.44		0.0 / 0.00	84 / 1.38		46 / 1.30			0.1			184[e]	46	84	15	38		
8/4 0800	458	75	8.0	93	458	7.5	2.02[c]		51 / 2.22		0.0 / 0.00	87 / 1.43		80 / 2.26			0.2			264[e]	52	101	30	70		
9/8 1110	286	77	8.4	100	673	7.7	21 / 1.05	17 / 1.39	83 / 3.61	3.0 / 0.08	0.0 / 0.00	88 / 1.44	48 / 1.00	138 / 3.89	0.7 / 0.01	0.1 / 0.01	0.1	16	Al 0.15 Cu 0.01[d] PO_4 0.20 Zn 0.01	370[f]	52	122	50	50		
10/6 0915	153	70	8.1	90	750	7.5	3.18[c]		77 / 3.35		0.0 / 0.00	127 / 2.08		140 / 3.95			0.3			433[e]	51	159	55	70	Median 23	
11/10 0940	64	57	10.2	98	910	7.7	4.00[c]		89 / 3.87		0.0 / 0.00	141 / 2.31		156 / 4.40			0.5			525[e]	49	200	84	25	Max. 230	
12/14 1510		49	12.2	106	102	7.8	0.56[c]		9.3 / 0.40		0.0 / 0.00	34 / 0.56		10 / 0.28			0.1			59[e]	42	28	0	20	Min. 0.23	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER ABOVE MERCED RIVER (STA. NO. 30a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USBR
1/14 1325		45			2,149	8.3	138	14	292	0.8	0.0	278	369	299	0.0					1396	61					
2/11 1210		54			1,136	8.2	42	27	157	5.1	0.0	165	188	150	2.5					704	61					
3/16 1150		58			2,919	8.1	109	76	432	6.3	0.0	261	518	518	3.1					1936	61					
4/13 1230		—			1,778	7.6	79	43	246	5.1	0.0	203	245	314	0.6					1140	62					
5/12 1320		73			1,330	7.8	58	33	154	5.9	0.0	181	177	159	2.5					818	54					
6/15 1245		81			1,617	7.6	68	41	201	5.5	0.0	195	177	304	1.9					998	56					
7/14 1240		76			1,390	7.7	70	28	163	3.9	---	185	177	228	1.2					836	54					
8/15 1315		79			1,704	7.5	67	41	200	5.5	0.0	198	203	313	1.9					1056	56					
9/15 1355		—			1,865	7.7	71	48	216	5.9	0.0	193	222	342	4.3					1112	55					
10/12 1320		67			3,048	7.3	101	84	412	5.9	0.0	228	456	593	5.0					1908	60					
11/14 1230		58			1,649	7.3	59	42	202	5.5	0.0	239	182	280	1.9					968	57					
12/12 1205		48			2,096	7.6	74	56	292	4.3	0.0	230	304	412	2.5					1430	60					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT MOSSDALE BRIDGE (STA. 102)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960	Tidal																									USGS
1/7 1400		46	11.9	100	652	7.4	2.82[c]		76 / 3.31		0.0 / 0.00	108 / 1.77		114 / 3.21			0.2			369[e]	54	141	52	15	Maximum >7,000 Minimum 0.5 Median 6.2	
2/15 1550		54	8.8	81	526	7.3	2.32[c]		55 / 2.39		0.0 / 0.00	106 / 1.74		72 / 2.03			0.2			298[e]	51	116	29	125		
3/15 1000		58	12.1	118	1,240	8.1	5.46[c]		140 / 6.09		0.0 / 0.00	166 / 2.72		251 / 7.08			0.4			702[e]	53	273	137	15		
4/14 1525		66	14.2	151	1,070	8.3	5.28[c]		116 / 5.05		0.0 / 0.00	200 / 3.28		197 / 5.56			0.3			605[e]	49	264	100	25		
5/12 1615		74	10.5	121	1,180	7.7	58 / 2.89	27 / 2.23	139 / 6.05	8.0 / 0.20	0.0 / 0.00	178 / 2.92	81 / 1.69	255 / 7.19	2.0 / 0.03	0.2 / 0.01	0.4	19	Fe 0.01 PO_4 0.50[d] Al 0.12	678[f]	53	256	110	50		
6/9 1445		78	10.6	128	1,180	8.1	5.40[c]		128 / 5.57		0.0 / 0.00	200 / 3.28		245 / 6.91			0.3			668[e]	51	270	106	60		
7/14 1215		75	12.2	142	1,050	8.1	4.64[c]		110 / 4.78		0.0 / 0.00	176 / 2.88		217 / 6.12			0.3			595[e]	51	232	88	20		
8/8 0925		78	11.7	141	1,050	8.1	4.40[c]		116 / 5.05		0.0 / 0.00	172 / 2.82		211 / 5.95			0.3			595[e]	53	220	79	20		
9/8 0955		73	9.8	112	1,190	8.1	65 / 3.24	29 / 2.36	149 / 6.48	7.8 / 0.20	0.0 / 0.00	222 / 3.64	57 / 1.19	260 / 7.33	0.0 / 0.00	0.1 / 0.01	0.3	23	Fe 0.04 PO_4 0.45[d] Al 0.10 Zn 0.15	700[f]	53	280	98	25		
10/7 0710		70	13.4	149	1,190	8.1	5.22[c]		127 / 5.52		0.0 / 0.00	196 / 3.21		221 / 6.23			0.0			674[e]	51	261	100	20		
11/10 1500		59	10.0	98	739	7.3	3.46[c]		86 / 3.74		0.0 / 0.00	127 / 2.08		137 / 3.86			0.2			418[e]	52	173	69	30		
12/15 1445		52	9.8	89	736	7.3	3.28[c]		86 / 3.74		0.0 / 0.00	124 / 2.03		132 / 3.72			0.0			417[e]	53	164	62	6		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT PATTERSON WATER COMPANY (STA. NO. 27a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USBR
1/14 1240		47			1,560	8.1	79	25	195	0.4	0.0	239	232	228	1.9					988	58					
2/11 1140		54			972	8.1	38	25	126	5.5	0.0	163	150	121	3.7					590	57					
3/16 1120		58			1,919	8.0	78	47	283	5.1	0.0	217	313	318	3.1					1232	61					
4/13 1125		—			1,101	7.5	50	27	145	3.5	0.0	171	138	171	1.9					652	57					
5/12 1235		73			1,232	8.0	53	29	145	4.7	0.0	184	153	200	1.9					730	55					
6/15 1200		78			1,367	7.6	60	32	184	5.1	0.0	193	204	247	1.9					842	58					
7/14 1145		75			1,291	8.2	56	27	151	2.0	---	192	136	215	1.9					788	57					
8/15 1230		77			1,393	8.3	64	28	173	4.3	0.0	203	186	231	0.0					852	56					
9/16 0920		—			1,417	7.7	59	30	169	4.3	0.0	185	140	239	3.7					840	57					
10/12 1240		67			1,479	7.2	59	34	171	4.7	0.0	195	166	249	5.0					876	56					
11/14 1130		60			1,243	7.5	50	30	145	3.1	0.0	200	132	189	3.1					776	55					
12/12 1130		48			1,298	7.4	54	33	163	2.7	0.0	187	144	231	1.2					880	57					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER ABOVE SALT SLOUGH (STA. NO. 111b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USBR
1/14 1400		44			744	8.3	46	12	90	0.4	0.0	256	50	79	1.2					448	54					
2/11 1245		54			186	7.9	12	65	16	3.1	0.0	66	22	12	4.3					166	37					
3/16 1235		59			1,129	8.2	56	23	155	4.7	0.0	245	96	178	2.5					724	58					
4/11 1315		--			973	7.6	56	16	121	4.3	0.0	189	79	157	1.9					628	56					
5/12 1355		74			737	8.0	42	18	82	5.5	0.0	162	60	108	1.9					452	49					
6/15 1325		81			772	7.5	44	19	93	5.9	0.0	167	99	121	3.7					482	51					
7/14 1320		79			982	8.2	54	19	104	3.9	---	203	72	155	1.9					580	51					
8/15 1400		79			1,158	7.8	54	21	138	6.3	0.0	194	96	193	1.9					708	57					
9/15 1430		--			1,125	6.7	53	24	119	6.3	0.0	144	73	210	1.9					632	52					
10/12 1350		68			1,248	7.0	54	26	138	5.9	0.0	190	82	229	1.9					724	55					
11/14 ----		--					Road too wet.																			
12/12 1300		48			776	7.6	39	17	97	27	0.0	242	42	108	1.2					496	55					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT SAN ANDREAS LANDING (STA. 112b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[g]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										
1/12 1000		46			239	8.8	18	9.0	13	1.6	14	82	4.8	13	0.0					128	25					USBR
2/11 1205		51			79	7.2	6.0	3.4	3.9	1.2	0.0	29	17	4.3	0.6					82	22					
3/17 1200		54			138	7.8	11	5.4	7.1	1.2	0.0	46	14	13	0.6					88	23					
4/11 1435		63			105	7.8	13	4.5	6.2	0.8	0.0	48	12	2.8	1.2					112	20					
5/12 1230		66			175	7.2	16	5.5	9.7	1.2	0.0	69	9.6	9.9	1.2					108	25					
6/15 ----		--			188	7.0	12	7.8	13	1.6	0.0	76	12	12	0.0					132	30					
7/14 1035		72			293	7.6	18	7.1	26	2.0	0.0	69	18	34	0.6					156	43					
8/15 1355		66			452	7.4	24	11	48	2.4	0.0	74	33	80	1.9					280	50					
9/12 1430		--			341	7.1	23	8.5	31	2.3	0.0	91	22	40	0.0					228	42					
10/11 1130		64			253	7.5	16	8.8	18	2.3	0.0	80	22	18	0.6					208	33					
11/14 1500		56			236	7.3	14	9.0	16	2.0	0.0	91	11	18	3.1					212	32					
12/13 1130		49			221	7.7	14	8.5	18	2.0	0.0	68	20	23	1.2					196	35					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR VERNALIS (STA. 27)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/7 1235	1480	48	11.2	96	546	7.3	2.46[c]		64 / 2.78		0.0 / 0.00	94 / 1.54		92 / 2.59			0.1			308[e]	53	123	46	55		
2/15 1300	2330	55	9.0	84	565	7.3	2.42[c]		59 / 2.57		0.0 / 0.00	112 / 1.84		86 / 2.43			0.3			314[e]	52	121	29	200		
3/15 0846	117	55	9.6	90	1,310	7.5	5.88[c]		143 / 6.22		0.0 / 0.00	174 / 2.85		269 / 7.59			0.5			740[e]	51	294	151	25		
4/14 1335	413	66	12.5	133	1,030	8.1	4.66[c]		116 / 5.05		0.0 / 0.00	174 / 2.85	68 / 1.42	198 / 5.58			0.3			582[e]	52	233	90	70		
5/5 1255	610	67	14.6	157	1,070	8.1	56 / 2.79	27 / 2.25	119 / 5.18	7.6 / 0.19	0.0 / 0.00	188 / 3.08	77 / 1.60	205 / 5.78	0.9 / 0.01	0.2 / 0.01	0.4	27	Fe 0.06 Pb 0.01[d] Al 0.16 As 0.01 PO_4 0.30	613[f]	50	252	98	12		
6/9 1330	253	77	11.0	131	1,250	7.9	5.52[c]		130 / 5.66		0.0 / 0.00	185 / 3.03		268 / 7.56			0.3			706[e]	51	276	124	50		
7/14 1055	164	78	14.1	170	1,260	8.1	5.36[c]		137 / 5.96		0.0 / 0.00	166 / 2.72		297 / 8.38			0.4			712[e]	53	268	132	20		
8/4 1550	290	81	16.2	200	1,240	8.1	5.48[c]		150 / 6.52		0.0 / 0.00	195 / 3.20		255 / 7.19			0.3			701[e]	54	274	114	35		
9/8 0855	385	72	10.5	119	1,260	7.9	62 / 3.09	32 / 2.65	155 / 6.74	5.4 / 0.14	0.0 / 0.00	210 / 3.44	77 / 1.60	256 / 7.22	0.4 / 0.01	0.3 / 0.02	0.4	27	Fe 0.14 PO_4 0.35[d] Al 0.13 Zn 0.03	719[f]	53	287	115	30		
10/6 1135	510	72	11.5	130	1,180	7.9	5.28[c]		138 / 6.00		0.0 / 0.00	197 / 3.23		232 / 6.54			0.4			666[e]	53	264	102	70	Median 230	
11/10 1350	968	58	8.9	87	769	7.5	3.40[c]		73 / 3.18		0.0 / 0.00	126 / 2.07		136 / 3.84			0.3			434[e]	48	170	67	10	Max. 7000	
12/15 1305	1300	52	9.5	86	668	7.3	3.00[c]		76 / 3.31		0.0 / 0.00	171 / 2.80		112 / 3.16			0.2			378[e]	52	150	10	10	Min. 2.3	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR VERNALIS (STA. 27) (continued)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1960																										
1/1-11					667	8.0	31 / 1.55	16 / 1.33	80 / 3.48	5.8 / 0.15	0.0 / 0.00	110 / 1.80	59 / 1.23	118 / 3.33	3.3 / 0.05	0.2 / 0.01	0.3	27		395	53	144	54			
1/12-24					783	8.2	38 / 1.90	18 / 1.46	94 / 4.09	7.4 / 0.19	0.0 / 0.00	136 / 2.23	89 / 1.85	128 / 3.61	4.4 / 0.07	0.2 / 0.01	0.3	27		473	54	168	56			
1/25-31					1010	7.6	46 / 2.30	23 / 1.90	122 / 5.31	8.2 / 0.21	0.0 / 0.00	158 / 2.59	109 / 2.27	170 / 4.79	3.3 / 0.05	0.2 / 0.01	0.4	30		590	55	210	80			
2/1-10					862	8.2	40 / 2.00	23 / 1.88	106 / 4.61	6.2 / 0.16	0.0 / 0.00	157 / 2.57	98 / 2.04	153 / 4.31	3.5 / 0.06	0.3 / 0.02	0.5	34		542	53	194	65			
2/11-15					520	7.3	27 / 1.35	13 / 1.09	58 / 2.52	6.5 / 0.17	0.0 / 0.00	117 / 1.92	52 / 1.08	72 / 2.03	3.2 / 0.05	0.2 / 0.01	0.4	32		322	49	122	26			
2/16-29					912	8.3	44 / 2.20	26 / 2.14	116 / 5.05	5.8 / 0.15	5 / 0.17	163 / 2.67	102 / 2.12	152 / 4.29	3.6 / 0.06	0.1 / 0.01	0.7	45	Tot. Alk. 173	580	53	217	75			
3/1-12					997	8.3	45 / 2.25	31 / 2.59	122 / 5.31	5.6 / 0.14	3 / 0.10	150 / 2.46	107 / 2.23	184 / 5.19	1.9 / 0.03	0.2 / 0.01	0.3	30	Tot. Alk. 156	604	52	242	114			
3/13-26					1370	8.3	70 / 3.49	33 / 2.71	157 / 6.83	8.6 / 0.22	10 / 0.33	164 / 2.69	92 / 1.92	301 / 8.49	3.3 / 0.05	0.3 / 0.02	0.4	35	Tot. Alk. 184	792	52	310	159			
3/27-31					1110	8.1	58 / 2.89	32 / 2.67	127 / 5.52	8.8 / 0.23	0.0 / 0.00	178 / 2.92	76 / 1.58	223 / 6.29	2.9 / 0.05	0.3 / 0.02	0.6	34		651	49	278	132			
4/1-5					1040	7.5	54 / 2.69	26 / 2.11	117 / 5.09	7.8 / 0.20	0.0 / 0.00	179 / 2.93	77 / 1.60	200 / 5.64	1.8 / 0.03	0.3 / 0.02	0.3	34		606	50	240	93			
4/6-10					1280	7.6	65 / 3.24	32 / 2.60	146 / 6.35	8.6 / 0.22	0.0 / 0.00	191 / 3.13	82 / 1.71	259 / 7.30	1.7 / 0.01	0.2 / 0.03	0.4	33		722	51	292	135			
4/11-27					1060	7.5	57 / 2.84	26 / 2.12	119 / 5.18	8.0 / 0.20	0.0 / 0.00	179 / 2.93	62 / 1.29	211 / 5.95	2.6 / 0.04	0.2 / 0.01	0.3	34		608	50	248	101			
4/28-30					765	7.6	40 / 2.00	19 / 1.60	85 / 3.70	5.8 / 0.15	0.0 / 0.00	153 / 2.51	63 / 1.31	128 / 3.61	3.6 / 0.06	0.2 / 0.01	0.2	30		450	50	180	55			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR VERNALIS (STA. 27) (continued)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										
5/1-4					980	8.1	51 / 2.54	28 / 2.30	105 / 4.57	7.0 / 0.18	0.0 / 0.00	180 / 2.95	70 / 1.46	188 / 5.30	2.4 / 0.04	0.2 / 0.01	0.4	33		574	48	242	94			
5/5-15					1170	7.6	60 / 2.99	34 / 2.77	132 / 5.74	8.0 / 0.20	0.0 / 0.00	190 / 3.11	80 / 1.67	252 / 7.11	2.2 / 0.04	0.2 / 0.01	0.5	34		697	49	288	132			
5/16-31					844	7.8	45 / 2.25	20 / 1.65	90 / 3.92	6.0 / 0.15	0.0 / 0.00	170 / 2.79	72 / 1.50	139 / 3.92	3.4 / 0.05	0.2 / 0.01	0.4	32		492	49	195	56			
6/1-9					1210	7.5	68 / 3.39	25 / 2.09	138 / 6.00	6.4 / 0.16	0.0 / 0.00	183 / 3.00	68 / 1.42	255 / 7.19	1.6 / 0.03	0.2 / 0.01	0.3	33		686	52	274	124			
6/11-20					1240	7.9	70 / 3.49	26 / 2.15	139 / 6.05	6.8 / 0.17	0.0 / 0.00	174 / 2.85	62 / 1.29	280 / 7.90	2.8 / 0.05	0.2 / 0.01	0.3	37		710	51	282	139			
6/21-30					1220	7.4	68 / 3.39	25 / 2.05	136 / 5.92	6.2 / 0.16	0.0 / 0.00	178 / 2.92	64 / 1.33	255 / 7.19	2.6 / 0.04	0.2 / 0.01	0.3	35		680	51	272	126			
7/1-10					1180	7.5	67 / 3.34	24 / 2.00	135 / 5.87	5.0 / 0.13	0.0 / 0.00	182 / 2.98	60 / 1.25	240 / 6.77	1.9 / 0.03	0.1 / 0.01	0.3	36		659	52	267	118			
7/11-20					1340	7.5	77 / 3.84	26 / 2.10	151 / 6.57	6.8 / 0.17	0.0 / 0.00	184 / 3.02	62 / 1.29	300 / 8.46	1.9 / 0.03	0.1 / 0.01	0.4	30		746	52	297	146			
7/21-30					1370	7.5	75 / 3.74	27 / 2.24	157 / 6.83	6.4 / 0.16	0.0 / 0.00	186 / 3.05	70 / 1.46	305 / 8.60	2.7 / 0.04	0.1 / 0.01	0.4	35		771	53	299	146			
8/1-10					1200	7.5	65 / 3.24	25 / 2.08	133 / 5.79	5.4 / 0.14	0.0 / 0.00	184 / 3.02	64 / 1.33	250 / 7.05	2.0 / 0.03	0.1 / 0.01	0.3	23		659	51	266	115			
8/11-20					1330	7.4	73 / 3.64	27 / 2.22	149 / 6.48	6.0 / 0.15	0.0 / 0.00	185 / 3.03	72 / 1.50	288 / 8.12	2.7 / 0.04	0.1 / 0.01	0.3	31		740	52	293	141			
8/21-31					1330	8.3	70 / 3.49	29 / 2.39	153 / 6.66	6.8 / 0.17	4 / 0.13	192 / 3.15	77 / 1.60	280 / 7.90	2.8 / 0.05	0.1 / 0.01	0.3	32	Tot. Alk. 200	750	52	294	130			
9/1-3					1340	7.4	72 / 3.59	28 / 2.33	146 / 6.35	6.2 / 0.16	0.0 / 0.00	199 / 3.26	70 / 1.46	284 / 8.01	1.6 / 0.03	0.1 / 0.01	0.3	41		747	51	296	133			
9/4-16					1250	8.3	66 / 3.29	28 / 2.31	139 / 6.05	5.6 / 0.14	5 / 0.17	192 / 3.15	75 / 1.56	255 / 7.19	1.5 / 0.02	0.1 / 0.01	0.3	36	Tot. Alk. 202	706	51	280	114			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR VERNALIS (STA. 27) (continued)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										
9/17-30					1260	8.3	66 / 3.29	29 / 2.35	143 / 6.22	5.8 / 0.15	5 / 0.17	194 / 3.18	80 / 1.67	250 / 7.05	2.5 / 0.04	0.1 / 0.01	0.4	37	Tot. Alk. 204	714	52	282	115			
10/1-12					1200	7.7	62 / 3.09	27 / 2.23	141 / 6.13	5.2 / 0.13	0.0 / 0.00	201 / 3.29	90 / 1.87	225 / 6.34	3.7 / 0.06	0.1 / 0.01	0.4	37		690	53	266	101			
10/13-20					858	7.1	44 / 2.20	20 / 1.66	96 / 4.18	4.3 / 0.11	0.0 / 0.00	147 / 2.41	67 / 1.39	150 / 4.23	3.2 / 0.05	0.0 / 0.00	0.2	32		489	51	193	72			
10/21-31					855	7.5	42 / 2.10	20 / 1.68	96 / 4.18	3.7 / 0.09	0.0 / 0.00	140 / 2.29	73 / 1.52	150 / 4.23	2.8 / 0.05	0.0 / 0.00	0.2	28		485	52	189	74			
11/1-10					762	8.4	39 / 1.95	18 / 1.45	85 / 3.70	3.2 / 0.08	3 / 0.10	121 / 1.98	63 / 1.31	136 / 3.84	2.7 / 0.04	0.1 / 0.01	0.2	26	Tot. Alk. 127	436	52	170	66			
11/11-20					741	8.5	38 / 1.90	18 / 1.50	82 / 3.57	2.8 / 0.07	3 / 0.10	128 / 2.10	57 / 1.19	130 / 3.67	3.1 / 0.05	0.1 / 0.01	0.3	26	Tot. Alk. 134	423	51	170	60			
11/21-30					837	8.4	44 / 2.20	19 / 1.54	93 / 4.05	2.8 / 0.07	3 / 0.10	137 / 2.25	67 / 1.39	154 / 4.34	3.3 / 0.05	0.1 / 0.01	0.3	30	Tot. Alk. 143	484	52	187	70			
12/1-10					711	7.5	36 / 1.80	17 / 1.36	69 / 3.00	3.4 / 0.09	0.0 / 0.00	124 / 2.03	59 / 1.23	110 / 3.10	3.2 / 0.05	0.2 / 0.01	0.3	27		386	48	158	56			
12/11-20					669	8.2	34 / 1.70	15 / 1.26	69 / 3.00	2.7 / 0.07	0.0 / 0.00	113 / 1.85	58 / 1.21	110 / 3.10	3.2 / 0.05	0.2 / 0.01	0.2	25		373	50	148	55			
12/21-31					667	7.4	33 / 1.65	15 / 1.27	69 / 3.00	2.7 / 0.07	0.0 / 0.00	111 / 1.82	56 / 1.17	110 / 3.10	3.4 / 0.05	0.2 / 0.01	0.3	25		370	50	146	55			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT WEST STANISLAUS I. D. INTAKE (STA. NO. 27b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USBR
1/15 1345		47			1,727	8.2	64	48	210	0.4	0.0	237	240	282	2.5					1068	56					
2/11 1110		54			1,226	8.3	45	33	168	5.5	0.0	196	204	168	3.7					766	59					
3/16 1100		58			1,869	8.2	79	56	255	4.7	0.0	240	298	313	4.3					1200	56					
4/14 0930		--			1,139	7.6	55	36	144	3.9	0.0	194	165	185	1.9					760	52					
5/13 0900		65			1,345	8.1	56	37	150	5.1	0.0	208	161	217	1.9					826	52					
6/16 0840		78			1,371	7.6	60	43	172	4.7	0.0	215	214	239	3.7					856	53					
7/14 1105		75			1,139	8.5	64	37	133	3.1	9.0	192	148	214	1.9					800	48					
8/16 0915		71			1,462	8.0	61	42	153	4.7	0.0	224	196	244	2.5					888	50					
9/16 1000		--			1,519	7.4	61	44	164	4.3	0.0	220	171	246	4.3					916	51					
10/13 0900		64			1,563	7.6	62	44	171	4.3	0.0	222	190	258	3.7					964	52					
11/15 1400		62			1,541	7.6	60	44	179	3.9	0.0	229	164	225	4.3					924	54					
12/13 0830		48			1,272	7.7	56	36	148	3.1	0.0	200	146	221	3.7					836	52					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B-4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT WHITEHOUSE (STA. NO. 24b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USBR
3/2 1440		55			84															52						
3/16 1215		59			97															52						
3/31 1245		64			75	7.7	7.0	2.0	6.7	1.6	0.0	31	15	2.1	1.2					88	35					
4/14 1150		66			79												0.08			56						
4/27 1250		59			67												0.08			32						
5/24 1245		68			84	7.9	7.2	1.3	9.2	1.6	0.0	32	8.6	8.2	0.6		0.10			76	44					
6/14 1400		84			86															72						
6/28 1015		75			87															92						
7/12 0900		73			83															88						
7/26 1130		81			75	7.3	4.6	2.0	7.6	1.2	0.0	24	1.0	7.8	0.6					104	44					
8/16 0945		74			87															58						
9/7 1400		77			76															46						
9/20 1400		76			71															36						
10/4 0830		69			75	6.4	6.0	2.1	8.5	1.6	0.0	22	24	5.7	0.0					50	42					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT WHITEHOUSE (STA. NO. 24b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million													Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
			ppm	%Sat			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents			Total ppm	N.C. ppm			
1960																										USBR
10/17 1310		63			73															68						
10/31 1120		61			74															106						
11/17 1315		54			81															68						
12/15 1255		48			62															64						

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

32505-D-H 6-61 200 SPO

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

STANISLAUS RIVER NEAR MOUTH (STA. 29)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/7 1310	145	49	12.0	104	286	7.5	2.20[c]		17 / 0.74		0.0 / 0.00	140 / 2.29		8.2 / 0.23			0.0			193[e]	25	110	0	20		
2/15 1425	193	57	9.6	92	263	7.3	1.96[c]		14 / 0.61		0.0 / 0.00	127 / 2.08		11 / 0.31			0.0			178[e]	24	98	0	35		
3/15 0915	35	56	10.2	97	314	7.3	2.54[c]		18 / 0.78		0.0 / 0.00	158 / 2.59		12 / 0.34			0.0			212[e]	23	127	0	5		
4/14 1435	45	69	8.3	91	269	7.3	2.08[c]		15 / 0.65		0.0 / 0.00	146 / 2.39		7.5 / 0.21			0.1			181[e]	24	104	0	35		
5/5 1330	39	72	8.3	94	294	7.1	28 / 1.40	11 / 0.92	16 / 0.70	3.1 / 0.08	0.0 / 0.00	167 / 2.74	8.0 / 0.17	7.2 / 0.20	1.6 / 0.03	0.2 / 0.01	0.0	32	Fe 0.06 Mn 0.13[d] Al 0.09 PO_4 0.10	189[f]	23	116	0	10		
6/9 1405	13 (est.)	82	10.3	129	285	7.3	2.23[c]		16 / 0.70		0.0 / 0.00	166 / 2.72		7.2 / 0.20			0.0			192[e]	24	111	0	18		
7/14 1130	85	85	8.9	115	276	7.1	2.40[c]		10 / 0.44		0.0 / 0.00	163 / 2.67		9.8 / 0.28			0.0			186[e]	15	120	0	10		
8/4 1730	<8	82	8.3	104	331	7.3	2.94[c]		22 / 0.96		0.0 / 0.00	195 / 3.20		15 / 0.42			0.0			223[e]	25	197	0	15		
9/8 0915	0	70	7.0	78	311	7.3	28 / 1.40	13 / 1.04	21 / 0.91	2.2 / 0.06	0.0 / 0.00	180 / 2.95	11 / 0.23	9.0 / 0.25	0.3 / 0.00	0.2 / 0.01	0.1	37	Fe 0.18 PO_4 0.15[d] Al 0.02 Zn 0.02	211[f]	27	122	0	9		
10/6 1340	87	74	7.7	89	316	7.3	2.34[c]		20 / 0.87		0.0 / 0.00	172 / 2.82		8.8 / 0.25			0.1			213[e]	27	117	0	60	Median 23	
11/10 1415	173	59	9.9	97	251	7.3	1.94[c]		14 / 0.61		0.0 / 0.00	131 / 2.15		6.5 / 0.18			0.1			169[e]	24	97	0	3	Max. 7000	
12/15 1340	197	53	11.0	100	228	7.5	1.88[c]		12 / 0.52		0.0 / 0.00	124 / 2.03		5.2 / 0.15			0.0			154[e]	22	94	0	3	Min. 1.3	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

STANISLAUS RIVER BELOW TULLOCH DAM (STA. 29a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/4 1315	26.8	47	10.3	87	96.2	7.1	0.96[c]		3.2 / 0.14		0.0 / 0.00	48 / 0.79		2.0 / 0.06			0.0			67[e]	13	48	9	20		
2/2 0830	228	45	10.7	88	111	7.2	1.00[c]		2.2 / 0.10		0.0 / 0.00	54 / 0.89		4.2 / 0.12			0.0			78[e]	9	50	6	35		
3/1 1400	4.7	52	13.1	119	93.9	8.0	0.84[c]		2.6 / 0.11		0.0 / 0.00	46 / 0.75		3.0 / 0.08			0.0			66[e]	12	42	4	5		
4/4 1305	656	49	10.1	88	80.2	7.1	0.72[c]		2.5 / 0.11		0.0 / 0.00	40 / 0.66		2.5 / 0.07			0.1			56[e]	13	36	3	4		
5/2 1400	136	65	9.9	104	55.6	7.2	6.8 / 0.34	1.9 / 0.16	1.9 / 0.08	0.9 / 0.02	0.0 / 0.00	29 / 0.48	4.0 / 0.08	1.2 / 0.03	0.0 / 0.00	0.0 / 0.00	0.0	12	Fe 0.02 Cu 0.01[d] Al 0.12 Zn 0.01 PO_4 0.05	43[f]	13	25	1	5		
6/1 1310	1410	60	8.6	86	52.7	7.1	0.38[c]		2.6 / 0.11		0.0 / 0.00	27 / 0.44		1.2 / 0.03			0.1			37[e]	22	19	0	18		
7/5 1335	1410	67	6.9	74	46.7	7.0	0.38[c]		1.3 / 0.06		0.0 / 0.00	26 / 0.43		2.2 / 0.06			0.0			33[e]	14	19	0	2		
8/8 1200	1200	74	6.5	75	61.7	7.1	0.49[c]		2.5 / 0.11		0.0 / 0.00	32 / 0.52		2.5 / 0.07			0.1			43[e]	18	25	0	10		
9/6 0940	750	73	7.7	88	64.7	7.3	7.6 / 0.38	1.8 / 0.15	2.5 / 0.11	1.0 / 0.03	0.0 / 0.00	36 / 0.59	2.0 / 0.04	1.0 / 0.03	0.0 / 0.00	0.0 / 0.00	0.0	10	Al 0.07 Cu 0.01[d] PO_4 0.05	44[f]	16	27	0	12		
10/4 0905	200	65	9.0	95	79.9	7.3	0.70[c]		1.9 / 0.08		0.0 / 0.00	42 / 0.69		1.4 / 0.04			0.0			56[e]	10	35	1	25	Median 1.8	
11/2 0925	75	58	9.5	92	65.5	7.1	0.57[c]		2.8 / 0.12		0.0 / 0.00	33 / 0.54		1.5 / 0.04			0.0			46[e]	17	28	1	1	Max. 1300	
12/13 1245	500	51	9.9	88	67.8	7.0	0.62[c]		2.4 / 0.10		0.0 / 0.00	36 / 0.59		0.5 / 0.01			0.0			47[e]	14	31	1	4	Min. 0.045	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

STOCKTON SHIP CHANNEL ON RINDGE ISLAND (STA. 100)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960	Tidal																									USGS
1/8 1245		45	8.3	69	850	7.0	4.17[c]		89/3.87		0.0/0.00	112/1.84		158/4.46			0.3			473[e]	48	208	116	15	Maximum >7,000 Minimum 2.3 Median 230	
2/16 1530		54	5.8	54	512	7.2	2.70[c]		53/2.31		0.0/0.00	100/1.64		80/2.26			0.1			285[e]	46	135	53	50		
3/15 1545		58	9.3	90	728	7.3	3.48[c]		82/3.57		0.0/0.00	130/2.13		117/3.30			0.2			405[e]	51	174	67	25		
4/15 1245		65	10.3	109	351	7.9	2.06[c]		32/1.39		0.0/0.00	82/1.34		48/1.35			0.2			195[e]	40	103	36	45		
5/6 1200		67	10.8	116	444	7.7	25/1.25	11/0.91	47/2.04	3.9/0.10	0.0/0.00	96/1.57	39/0.81	70/1.97	2.7/0.04	0.1/0.01	0.2	10	Fe 0.06 Cu 0.01[d] PO_4 0.20 Al 0.09	256[f]	47	108	29	60		
6/10 1100		75	7.0	82	314	7.3	1.76[c]		27/1.17		0.0/0.00	88/1.44		39/1.10			0.1			175[e]	40	88	16	125		
7/15 0945		75	6.0	70	282	7.3	1.64[c]		25/1.09		0.0/0.00	108/1.77		34/0.96			0.1			157[e]	41	82	0	30		
8/8 1140		78	6.7	81	329	7.3	1.60[c]		34/1.48		0.0/0.00	86/1.41		49/1.38			0.0			183[e]	48	80	9	35		
9/9 0845		73	6.7	77	422	7.3	19/0.95	14/1.15	37/1.61	2.5/0.06	0.0/0.00	90/1.48	14/0.29	73/2.06	0.6/0.01	0.1/0.01	0.1	17	Al 0.17 Zn 0.05[d] PO_4 0.25	221[f]	43	105	31	60		
10/3 1055		71	7.6	85	477	7.3	2.22[c]		46/2.00		0.0/0.00	109/1.79		78/2.20			0.1			265[e]	47	111	22	90		
11/1 1120		63	9.4	97	644	7.4	2.88[c]		76/3.31		0.0/0.00	144/2.36		59/1.66			0.2			358[e]	53	144	26	30		
12/16 1315		52	7.1	64	749	7.3	3.36[c]		89/3.87		0.0/0.00	132/2.16		134/3.78			0.0			416[e]	54	168	60	19		

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

STONY CREEK AT BLACK BUTTE DAM SITE (STA. 13c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 1705	13	50	11.1	98	448	7.7	49 / 2.45	19 / 1.55	18 / 0.78	1.2 / 0.03	0.0 / 0.00	228 / 3.74	23 / 0.48	26 / 0.73	0.0 / 0.00	0.0 / 0.00	0.3	16		264[f]	16	200	13			
2/2 1525	840	49	10.6	92	318	7.4	29 / 1.45	9.2 / 0.76	19 / 0.83	2.3 / 0.06	0.0 / 0.00	95 / 1.56	22 / 0.46	40 / 1.13	2.0 / 0.03	0.4 / 0.02	0.1	11		182[f]	27	110	32			
3/8 1515	3,000	52	10.5	95	198	7.5	22 / 1.10	7.1 / 0.58	9.9 / 0.43	1.5 / 0.04	0.0 / 0.00	81 / 1.33	15 / 0.31	17 / 0.48	0.4 / 0.01	0.1 / 0.01	0.2	18		131[f]	20	84	18			
4/12 1430	202	60	9.7	97	250	7.7	27 / 1.35	9.4 / 0.77	12 / 0.52	1.6 / 0.04	0.0 / 0.00	116 / 1.90	19 / 0.40	14 / 0.39	1.1 / 0.02	0.1 / 0.01	0.0	13		154[f]	19	106	11			
5/9 1325	125	66	9.5	101	249	7.9	29 / 1.45	8.6 / 0.71	11 / 0.48	1.0 / 0.03	0.0 / 0.00	118 / 1.93	17 / 0.35	16 / 0.45	0.4 / 0.01	0.2 / 0.01	0.1	10	Fe 0.05 Al 0.37[d]	151[f]	18	108	11	50		
6/14 1435	141	73	8.5	97	259	7.9	24 / 1.20	11 / 0.88	12 / 0.52	0.7 / 0.02	2 / 0.07	123 / 2.02	11 / 0.23	12 / 0.34	0.7 / 0.01	0.0 / 0.00	0.2	14	Tot. Alk. 127	149[f]	20	104	0			
7/11 1320	104	74	8.4	97	274	7.9	26 / 1.30	12 / 1.00	12 / 0.52	1.1 / 0.03	0.0 / 0.00	144 / 2.36	9.0 / 0.19	14 / 0.39	0.5 / 0.01	0.1 / 0.01	0.3	14		160[f]	18	115	0			
8/2 1145	114	74	8.2	95	283	7.7	27 / 1.35	13 / 1.05	13 / 0.57	0.6 / 0.02	0.0 / 0.00	152 / 2.49	10 / 0.21	14 / 0.39	0.4 / 0.01	0.0 / 0.00	0.2	18		171[f]	19	120	0			
9/12 1100	78	72	8.4	95	307	7.9	26 / 1.30	17 / 1.36	16 / 0.70	0.9 / 0.02	3 / 0.10	159 / 2.61	10 / 0.21	13 / 0.37	0.3 / 0.00	0.0 / 0.00	0.3	13	Fe 0.08 PO_4 0.15[d] Al 0.07 Tot. Alk. 165	178[f]	21	133	0	60		
10/10 1530	36	61	9.5	96	334	7.9	2.94[c]		15 / 0.65		0.0 / 0.00	169 / 2.77		16 / 0.45			0.3			196[e]	18	147	8	150		
11/1 1430	35 (est.)	65	10.6	112	430	7.9	3.56[c]		25 / 1.09		5 / 0.17	194 / 3.18		28 / 0.79			0.5		Tot. Alk. 204	254[e]	23	178	11	110		
12/5 1240	112	51	10.2	91	453	7.5	46 / 2.30	15 / 1.27	23 / 1.00	0.9 / 0.02	4 / 0.13	151 / 2.47	32 / 0.67	42 / 1.18	1.2 / 0.02	0.0 / 0.00	0.0	13	Tot. Alk. 159	251[f]	22	178	48			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc (TTL), or California Department of Water Resources (DWR), as indicated.

TABLE [illegible]

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

STONY CREEK NEAR HAMILTON CITY (STA. 13a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/13	Not Sampled - Dry																									
2/2 0855	328	48	10.7	92	351	7.5	2.80[c]		21 / 0.91		0.0 / 0.00	110 / 1.80		44 / 1.24			0.0			202[e]	25	140	50	85	Median 2.3	
3/9 1212	2,240	52	10.7	97	217	7.5	1.76[c]		10 / 0.44		0.0 / 0.00	96 / 1.57		16 / 0.45			0.1			125[e]	20	88	9	1000	Maximum 230.	
4/13 1035	100	63	9.8	101	286	7.7	2.31[c]		12 / 0.52		0.0 / 0.00	140 / 2.29		16 / 0.45			0.1			164[e]	18	116	1	7.5	Minimum 0.046	
5/9 1225	9.9	75	8.5	99	320	7.9	32 / 1.60	15 / 1.24	14 / 0.61	1.0 / 0.03	0.0 / 0.00	154 / 2.52	19 / 0.40	20 / 0.56	0.0 / 0.00	0.1 / 0.01	0.2	10	Al 0.24 PO_4 0.05[d]	187[f]	18	142	16	10		
6/15	Dry - Not Sampled																									
7/11	Dry - Not Sampled																									
8/2	Dry - Not Sampled																									
9/12	Dry - Not Sampled																									
10/10	Dry - Not Sampled																									
11/1	Dry - Not Sampled																									
12/5 1145	60	48	11.1	95	415		7.7 / 3.42[c]		20 / 0.87		0.0 / 0.00	160 / 2.62		36 / 1.02			0.1			238[e]	20	171	41	16		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

THOMES CREEK NEAR MOUTH (STA. 95b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12	Dry																									
2/1 1255	1,000 est.	51	10.3	92	133	7.3	16 / 0.80	3.3 / 0.27	3.4 / 0.15	1.1 / 0.03	0.0 / 0.00	56 / 0.92	10 / 0.21	1.6 / 0.05	1.8 / 0.03	0.4 / 0.02	0.0	11		77[f]	12	54	8			
3/7 0955	1,250 est.	51	10.5	94	127	7.5	19 / 0.95	3.0 / 0.25	3.2 / 0.14	1.7 / 0.04	0.0 / 0.00	63 / 1.03	14 / 0.29	3.0 / 0.08	0.0 / 0.00	0.1 / 0.01	0.1	24		99[f]	10	60	8			
4/11 1030	130 est.	58	10.2	99	157	7.5	22 / 1.10	4.1 / 0.34	3.1 / 0.13	1.1 / 0.03	0.0 / 0.00	79 / 1.29	9.0 / 0.19	3.0 / 0.08	1.1 / 0.02	0.1 / 0.01	0.0	13		96[f]	8	72	7			
5/10 0715	120 est.	63	9.1	94	198	7.6	27 / 1.35	6.0 / 0.49	3.7 / 0.16	1.0 / 0.03	0.0 / 0.00	104 / 1.70	7.0 / 0.15	4.0 / 0.11	0.4 / 0.01	0.2 / 0.01	0.1	11	Fe 0.01 Al 0.11[d] PO_4 0.10	111[f]	8	92	7	25		
6/13 0845	32 est.	76	7.9	93	230	7.7	31 / 1.55	8.3 / 0.68	4.5 / 0.20	0.7 / 0.02	2 / 0.07	129 / 2.11	8.8 / 0.18	1.6 / 0.05	2.5 / 0.04	0.0 / 0.00	0.0	14	Tot. Alk. 133	137[f]	8	112	3			
7/12 0645	4 est.	69	5.9	65	253	7.3	/ 2.33[c]		4.8 / 0.21		0.0 / 0.00	144 / 2.36		2.4 / 0.07			0.1			154[e]	8	116	0	85		
8/3 0950	2 est.	76	8.4	99	260	7.3	/ 2.49[c]		5.5 / 0.24		0.0 / 0.00	150 / 2.46		3.9 / 0.11			0.0			158[e]	9	125	2	10		
9/13	Dry -- Not Sampled																									
10/11	Dry -- Not Sampled																									
11/2	Dry -- Not Sampled																									
12/6 1130	40 est.	40	12.1	93	246	7.5	/ 2.32[c]		7.0 / 0.30		0.0 / 0.00	112 / 1.84		7.2 / 0.20			0.0			150[e]	11	116	24	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

THOMES CREEK AT PASKENTA (STA. 134)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/12 1505	26	43	12.5	101	316	7.7	2.64[c]		15 / 0.65		0.0 / 0.00	130 / 2.13		20 / 0.56			0.2			188[e]	20	132	25	2		
2/2 1425	532	45	11.4	94	131	7.3	1.16[c]		3.4 / 0.15		0.0 / 0.00	61 / 1.00		8.0 / 0.23			0.0			78[e]	11	58	8	110		
3/8 1400	1,660	46	11.4	96	105	7.5	1.04[c]		2.1 / 0.09		0.0 / 0.00	54 / 0.89		2.5 / 0.07			0.0			63[e]	8	52	8	1,000		
4/12 1320	263	53	10.4	95	136	7.5	1.27[c]		2.8 / 0.12		0.0 / 0.00	69 / 1.13		2.0 / 0.06			0.0			81[e]	9	63	6	20		
5/9 1440	231	67	8.7	94	140	7.5	22 / 1.10	3.2 / 0.26	2.9 / 0.13	0.7 / 0.02	0.0 / 0.00	72 / 1.18	11 / 0.23	4.0 / 0.11	0.0 / 0.00	0.2 / 0.01	0.1	10	Fe 0.08 Cu 0.02[d] Al 0.29	89[f]	9	68	9	50		
6/14 1335	90	80	7.5	92	169	7.9	1.56[c]		4.3 / 0.19		0.0 / 0.00	86 / 1.41		5.2 / 0.15			0.0			101[e]	11	78	7	1		
7/11 1445	17	87	7.8	103	269	8.1	2.42[c]		8.0 / 0.35		0.0 / 0.00	130 / 2.13		10 / 0.28			0.1			160[e]	13	121	14	1		
8/2 1245	7.2	81	8.8	109	297	8.1	2.40[c]		13 / 0.57		0.0 / 0.00	108 / 1.77		17 / 0.48			0.2			177[e]	19	120	31	7		
9/12 1210	2.2	79	9.0	110	389	8.1	40 / 2.00	12 / 0.97	19 / 0.83	1.0 / 0.03	2 / 0.07	110 / 1.80	49 / 1.02	37 / 1.04	0.0 / 0.00	0.1 / 0.01	0.2	9.4	Fe 0.03 Cu 0.01[d] Al 0.04 PO_4 0.05 Tot. Alk. 114	224[f]	22	149	56	1		
10/10 1725	4.1	61	10.4	104	453	7.9	3.76[c]		20 / 0.87		5 / 0.17	122 / 2.00		41 / 1.16			0.2		Tot. Alk. 132	270[e]	19	188	80	3		
11/1 1605	4.1	66	11.0	117	443	7.9	3.60[c]		23 / 1.00		0.0 / 0.00	136 / 2.23		42 / 1.18			0.2			264[e]	22	180	68	1		
12/5 1330	111	43	11.7	94	196	7.5	1.84[c]		6.2 / 0.27		0.0 / 0.00	88 / 1.44		8.0 / 0.23			0.1			117[e]	13	92	20	15		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

TULE RIVER NEAR PORTERVILLE (STA. 91)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/5 1600		47	12.8	105	418	7.7[a]	3.40[c]		26 / 1.13		6.9 / 0.23	206 / 3.38		16 / 0.45			0.2		Tot. Alk. 220	274[e]	25	170	0	10		
2/4 0750		47	10.8	93	238	7.5[a]	1.88[c]		14 / 0.61		0.0 / 0.00	118 / 1.93		11 / 0.31			0.0			156[e]	24	94	0	50		
3/3 0950		51	11.0	110	278	7.9[a]	2.12[c]		16 / 0.70		0.0 / 0.00	151 / 2.47		9.8 / 0.28			0.1			182[e]	25	106	0	120		
4/5 1530		74	7.0	81	254	8.4[a]	2.04[c]		14 / 0.61		0.0 / 0.00	136 / 2.23		6.5 / 0.18			0.1			167[e]	23	102	0	1000		
5/5 1140		63	9.7	100	182	7.7[a]	27 / 1.35	2.6 / 0.21	9.9 / 0.43	1.9 / 0.05	0.0 / 0.00	103 / 1.69	6.0 / 0.12	6.5 / 0.18	0.4 / 0.01	0.1 / 0.01	0.0	24	Fe 0.11 Cu 0.02[d] PO_4 0.10 Zn 0.02 Al 0.19	130[f]	21	78	0	10		
6/2 0945		81	8.3	103	228	8.1[b]	1.92[c]		10 / 0.44		0.0 / 0.00	136 / 2.23		8.0 / 0.23			0.1			150[e]	19	96	0	20		
7/7 0655	0.2 (est)	72	7.2	82	420	7.3[a]	3.54[c]		25 / 1.09		0.0 / 0.00	257 / 4.21		16 / 0.45			0.2			276[e]	24	177	0	1		
8/9 0930	5 (est)	82	7.3	92	404	8.1[a]	3.10[c]		28 / 1.22		0.0 / 0.00	224 / 3.67		14 / 0.39			0.1			265[e]	28	155	0	2000		
9/7	Not Sampled -- No Flow																								Median 13	
10/5	Dry -- Not Sampled																									
11/	Dry -- Not Sampled																								Max. 2400	
12/15 1045	25	49	12.0	104	402	7.9[a]	3.28[c]		25 / 1.09		0.0 / 0.00	232 / 3.80		16 / 0.45			0.0			264[e]	25	164	0	6	Min. 0.23	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

TUOLUMNE RIVER BELOW DON PEDRO DAM (STA. 31a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1960																										USGS
1/15 0930	1,420	48	9.1	78	39.9	6.8	0.28[c]		1.6 / 0.07		0.0 / 0.00	15 / 0.25		1.5 / 0.04			0.0			30[e]	20	14	2	12		
2/8 1400	302	48	9.4	81	61.6	6.8	0.52[c]		1.9 / 0.08		0.0 / 0.00	26 / 0.43		3.4 / 0.10			0.0			47[e]	13	26	5	70		
3/11 1000	960	49	9.5	83	78.1	6.9	0.78[c]		2.6 / 0.11		0.0 / 0.00	32 / 0.52		4.0 / 0.11			0.0			60[e]	12	39	13	7		
4/7 1030	2,660	51	9.4	84	58.1	6.8	0.48[c]		1.8 / 0.08		0.0 / 0.00	28 / 0.46		2.8 / 0.08			0.1			44[e]	14	24	1	15		
5/10 0900	1,740		9.3		41.3	6.6[b]	4.0 / 0.20	1.2 / 0.10	1.3 / 0.06	0.4 / 0.01	0.0 / 0.00	20 / 0.33	1.0 / 0.02	0.5 / 0.01	0.0 / 0.00	0.0 / 0.00	0.0	9.0	Fe 0.05 Cu 0.01[d] PO_4 0.05	27[f]	16	15	0	5		
6/10 0930	2,300	59	6.8	67	35.1	7.0	0.30[c]		1.4 / 0.06		0.0 / 0.00	17 / 0.28		3.0 / 0.08			0.0			27[e]	17	15	1	2		
7/7 1115	2,570	63	7.2	74	22.7	6.8	0.18[c]		0.9 / 0.04		0.0 / 0.00	10 / 0.16		1.8 / 0.05			0.0			17[e]	18	9	1	4		
8/9 0740	900	70	4.4	49	29.0	6.7	0.22[c]		1.6 / 0.07		0.0 / 0.00	13 / 0.21		2.2 / 0.06			0.0			22[e]	24	11	0	10		
9/27 1000	660	68	5.6	61	29.9	6.7	3.5 / 0.17	0.7 / 0.06	1.2 / 0.05	0.5 / 0.01	0.0 / 0.00	13 / 0.21	1.6 / 0.03	0.8 / 0.02	0.3 / 0.00	0.1 / 0.01	0.0	5.5	Al 0.09 PO_4 0.00[d]	20[f]	17	11	0	19		
10/10 1045	960	64	6.4	67	25.4	6.8	0.18[c]		1.7 / 0.07		0.0 / 0.00	11 / 0.18		1.5 / 0.04			0.1			19[e]	28	9	0	60	Median 4.25	
11/11 1025	840	57	8.0	77	24.7	6.7	0.20[c]		1.5 / 0.07		0.0 / 0.00	11 / 0.18		1.8 / 0.05			0.1			19[e]	26	10	1	4	Max. 7000	
12/14 1015	1,820	50	9.2	81	31.3	6.8	0.26[c]		1.6 / 0.07		0.0 / 0.00	14 / 0.23		1.5 / 0.04			0.0			24[e]	21	13	2	12	Min. 0.045	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

TUOLUMNE RIVER AT HICKMAN-WATERFORD BRIDGE (STA. 30)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/15 1040	824	48	11.4	98	87.2	7.0	0.50[c]		6.0 / 0.26		0.0 / 0.00	24 / 0.39		10 / 0.28			0.0			51[e]	34	25	5	6		
2/8 1220	312	46	9.2	77	197	7.3	1.00[c]		17 / 0.74		0.0 / 0.00	46 / 0.75		36 / 1.02			0.1			115[e]	43	50	12	15		
3/11 1140	160	58	9.8	95	346	7.8	1.72[c]		33 / 1.44		0.0 / 0.00	74 / 1.21		68 / 1.92			0.1			202[e]	46	86	25	10		
4/7 1200	115	72	11.6	131	481	8.2	2.28[c]		47 / 2.04		0.0 / 0.00	100 / 1.64		96 / 2.71			0.1			280[e]	47	114	32	3		
5/10 1015	103		7.8		538	8.2	30 / 1.50	10 / 0.86	62 / 2.70	6.8 / 0.17	0.0 / 0.00	107 / 1.75	5.0 / 0.10	112 / 3.16	0.2 / 0.00	0.1 / 0.01	0.1	48	Fe 0.02 Cu 0.01[d] PO_4 0.10	327[f]	52	118	30	4		
6/10 1130	85 (est.)	78	8.8	106	551	8.2	2.78[c]		56 / 2.44		0.0 / 0.00	113 / 1.85		120 / 3.38			0.1			321[e]	47	139	46	5		
7/7 1200	85	81	8.7	108	548	8.5	2.40[c]		54 / 2.35		0.0 / 0.00	114 / 1.87		116 / 3.27			0.1			319[e]	49	120	27	3		
8/9 0900	85	75	8.2	96	558	8.3	2.70[c]		60 / 2.61		0.0 / 0.00	116 / 1.90		120 / 3.38			0.0			325[e]	49	135	40	10		
9/27 1140	119	72	8.4	95	552	8.4	31 / 1.55	11 / 0.91	55 / 2.39	5.7 / 0.15	0.0 / 0.00	112 / 1.84	6.0 / 0.12	110 / 3.10	0.6 / 0.01	0.3 / 0.02	0.1	53	Al 0.11 Zn 0.01[d] PO_4 0.15	328[f]	48	123	31	8		
10/10 1230	119	64	9.1	95	543	8.2	2.40[c]		56 / 2.44		0.0 / 0.00	110 / 1.80		108 / 3.05			0.1			316[e]	50	120	30	25	Median 23	
11/11 1310	364	60	8.5	85	143	7.3	0.62[c]		15 / 0.65		0.0 / 0.00	27 / 0.44		29 / 0.82			0.0			83[e]	51	31	9	3	Max. 7000	
12/14 1220	679	51	8.1	72	102	7.2	0.60[c]		8.0 / 0.35		0.0 / 0.00	30 / 0.49		14 / 0.39			0.0			59[e]	37	30	5	4	Min. 0.13	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

TUOLUMNE RIVER AT TUOLUMNE CITY (STA. 31)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/15 1400	1445	51	8.9	79	346	7.2	1.54[c]		37 / 1.61		0.0 / 0.00	59 / 0.97		73 / 2.06			0.2			198[e]	51	77	29	8		
2/9 1100	570	56	6.0	57	487	7.2	2.10[c]		48 / 2.09		0.0 / 0.00	87 / 1.43		107 / 3.02			0.2			278[e]	50	105	34	25		
3/11 1430	430	61	6.6	66	554	7.3	2.46[c]		58 / 2.52		0.0 / 0.00	100 / 1.64		112 / 3.16			0.2			316[e]	51	123	41	8		
4/7 1530	255	74	15.9	178	979	8.5	4.28[c]		101 / 4.39		0.0 / 0.00	161 / 2.64		223 / 6.29			0.2			558[e]	51	214	82	10		
5/10 1420	250	78	9.3	112	947	8.3	55 / 2.74	14 / 1.18	120 / 5.22	10 / 0.26	0.0 / 0.00	157 / 2.57	11 / 0.23	236 / 6.66	2.2 / 0.04	0.1 / 0.01	0.1	43	Fe 0.02 PO_4 1.4[d] Al 0.16 Cu 0.01	570[f]	56	196	67	18		
6/10 1455	245	81	6.7	83	968	8.0	4.70[c]		108 / 4.70		0.0 / 0.00	157 / 2.57		235 / 6.63			0.1			553[e]	50	235	106	25		
7/7 1215	225	81	6.6	82	1,000	8.3	4.08[c]		104 / 4.52		0.0 / 0.00	167 / 2.74		238 / 6.71			0.1			572[e]	53	204	67	3		
8/9 1320	220	78	6.0	72	969	7.6	4.14[c]		117 / 5.09		0.0 / 0.00	160 / 2.62		210 / 5.92			0.1			553[e]	55	207	76	10		
9/27 1530	255	72	5.9	67	1,060	7.7	58 / 2.89	18 / 1.44	106 / 4.61	8.2 / 0.21	0.0 / 0.00	166 / 2.72	18 / 0.37	218 / 6.15	3.8 / 0.06	0.3 / 0.02	0.2	46	Al 0.12 PO_4 0.70[d]	558[f]	50	215	80	16		
10/10 1340	265	62	8.2	83	1,040	7.8	4.32[c]		114 / 4.96		0.0 / 0.00	167 / 2.74		232 / 6.54			0.2			594[e]	53	216	79	35	Median 230	
11/11 1430	640	59	6.8	68	420	7.2	1.84[c]		47 / 2.04		0.0 / 0.00	66 / 1.08		94 / 2.65			0.1			240[e]	53	92	38	4	Max. 7000	
12/14 1415	865	52	7.8	70	356	7.0	1.54[c]		37 / 1.61		0.0 / 0.00	54 / 0.89		70 / 1.97			0.0			203[e]	51	77	33	8	Min. 13	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ excep. as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

YUBA RIVER AT MARYSVILLE (STA. 21)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/6 1440	366	46	12.0	100	142	7.7	1.32[c]		3.6 / 0.16		0.0 / 0.00	69 / 1.13		2.0 / 0.06			0.1			98[e]	11	66	9	4	Maximum 130 Minimum 0.13 Median 2.3	
2/12 1230	5,750	48	11.7	100	54.9	7.2	0.46[c]		1.5 / 0.07		0.0 / 0.00	22 / 0.36		3.5 / 0.10			0.2			38[e]	13	23	5	220		
3/3 1630	2,180	48	11.4	98	69	7.1	0.62[c]		2.2 / 0.10		0.0 / 0.00	32 / 0.52		2.0 / 0.06			0.0			48[e]	14	31	5	50		
4/4 1500	4,800	58	10.4	101	62.3	6.8	0.58[c]		1.5 / 0.07		0.0 / 0.00	38 / 0.62		0.8 / 0.02			0.0			43[e]	11	29	0	15		
5/5 0830	2,870	54	10.2	94	67.5	7.3	7.6 / 0.38	3.2 / 0.26	1.9 / 0.08	0.3 / 0.01	0.0 / 0.00	38 / 0.62	3.0 / 0.06	1.5 / 0.04	0.1 / 0.00	0.0 / 0.00	0.1	15	Fe 0.08 Al 0.08[d] PO_4 0.05 Pb 0.01	52[f]	11	32	1	40		
6/3 0755	2,540	62	8.9	91	61.6	7.1	0.54[c]		1.5 / 0.07		0.0 / 0.00	34 / 0.56		0.8 / 0.02			0.0			43[e]	11	27	0	12		
7/7 1255	N.R.	80	7.9	97	126	7.3	1.12[c]		2.4 / 0.10		0.0 / 0.00	63 / 1.03		3.0 / 0.08			0.0			87[e]	8	56	4	10		
8/12 1430	81	83	7.7	98	150	7.3	1.52[c]		3.8 / 0.17		0.0 / 0.00	72 / 1.18		0.0 / 0.00			0.0			104[e]	10	76	17	18		
9/14 1530	230	79	8.7	106	118	7.6	13 / 0.65	5.0 / 0.41	3.7 / 0.16	0.6 / 0.02	0.0 / 0.00	64 / 1.05	8.8 / 0.18	1.5 / 0.04	0.0 / 0.00	0.0 / 0.00	0.0	16	Fe 0.03 Cu 0.01[d] Al 0.01 As 0.01 PO_4 0.00	81[f]	13	53	1	2		
10/3 1020	239	70	8.3	92	134	7.3	1.28[c]		3.5 / 0.15		0.0 / 0.00	68 / 1.11		3.0 / 0.08			0.0			93[e]	10	64	8	300		
11/3 1500	26	62	9.2	94	169	7.3	1.54[c]		3.9 / 0.17		0.0 / 0.00	79 / 1.29		1.5 / 0.04			0.0			117[e]	10	77	12	10		
12/19 1025	610	49	11.2	97	113	7.3	1.02[c]		4.5 / 0.20		0.0 / 0.00	64 / 1.05		2.0 / 0.06			0.0			78[e]	16	51	0	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

YUBA RIVER NEAR SMARTVILLE (STA. 21a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/6 1340	182	44	12.0	98	126	7.3	1.20[c]		4.0 / 0.17		0.0 / 0.00	64 / 1.05		2.0 / 0.06			0.0			90[e]	12	60	8	10	Maximum 50 Minimum 0.06 Median 2.3	
2/12 0830	4,940	45	12.2	101	47.2	7.0	0.42[c]		1.0 / 0.04		0.0 / 0.00	21 / 0.34		3.0 / 0.08			0.0			34[e]	9	21	4	190		
3/3 1600	1,150	46	11.3	95	59.3	7.1	0.54[c]		1.5 / 0.07		0.0 / 0.00	30 / 0.49		0.0 / 0.00			0.0			42[e]	11	27	2	55		
4/5 1000	4,540	53	10.9	100	56.1	7.3	0.49[c]		1.3 / 0.06		0.0 / 0.00	33 / 0.54		0.0 / 0.00			0.0			40[e]	11	25	0	5		
5/5 1000	2,670	55	10.4	97	65.1	7.3	7.1 / 0.35	2.6 / 0.21	1.8 / 0.08	0.3 / 0.01	0.0 / 0.00	36 / 0.59	1.4 / 0.03	1.8 / 0.05	0.0 / 0.00	0.0 / 0.00	0.0	12	Fe 0.01 Al 0.04 PO4 0.00 Cu 0.01 [d]	45[f]	12	28	0	8		
6/3 0835	3,640	62	9.2	94	57.9	7.3	0.50[c]		1.3 / 0.06		0.0 / 0.00	31 / 0.51		0.9 / 0.03			0.1			41[e]	11	25	0	12		
7/7 1150	N.R.	71	8.1	91	72.0	7.3	0.68[c]		1.5 / 0.07		0.0 / 0.00	43 / 0.70		1.0 / 0.03			0.0			51[e]	9	34	0	1		
8/12 1300	502	78	7.6	91	107	7.3	1.22[c]		2.8 / 0.12		0.0 / 0.00	60 / 0.98		2.0 / 0.06			0.0			76[e]	9	61	12	10		
9/14 1405	N.R.	75	8.3	97	117	7.5	15 / 0.75	4.1 / 0.34	3.9 / 0.17	0.6 / 0.02	0.0 / 0.00	63 / 1.03	12 / 0.25	1.5 / 0.04	0.0 / 0.00	0.0 / 0.00	0.0	14	Fe 0.04 Cu 0.01 Al 0.04 PO4 0.10 [d]	82[f]	13	55	3	1		
10/3 1130	404	71	8.8	99	130	7.5	1.24[c]		3.6 / 0.16		0.0 / 0.00	64 / 1.05		4.0 / 0.11			0.0			93[e]	11	62	10	2		
11/3 1345	N.R.	61	9.0	91	131	7.3	1.16[c]		3.7 / 0.16		0.0 / 0.00	66 / 1.08		2.0 / 0.06			0.0			93[e]	12	58	4	1		
12/8 1510	N.R.	49	12.2	106	109	7.5	1.02[c]		3.1 / 0.13		0.0 / 0.00	58 / 0.95		1.2 / 0.03			0.0			78[e]	11	51	3	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

CARSON RIVER, EAST FORK NEAR MARKLEEVILLE (STA. 115)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/5 1040		32	11.6	79	172	7.4	1.28/1.28[c]		12/0.52		0.0/0.00	82/1.34		4.5/0.13			0.2			130[e]	29	64	0	2	Maximum 230 Minimum <0.045 Median 1.3	
2/10 1340		35	11.1	79		7.3	Sample broken in transit																			
3/2 1055		34	11.3	79	169	7.4	1.22/1.22[c]		11/0.48		0.0/0.00	76/1.25		8.5/0.24			0.3			128[e]	28	61	0	1		
4/7 0950		44	9.9	81	164	7.6	1.44/1.44[c]		4.0/0.17		0.0/0.00	63/1.03		2.0/0.06			0.0			124[e]	11	72	20	5.5		
5/12 0745		44	9.5	77	59.3	7.2	6.5/0.32	1.9/0.16	2.6/0.11	1.0/0.03	0.0/0.00	28/0.46	5.0/0.10	1.2/0.03	0.7/0.01	0.0/0.00	0.1	14	Fe 0.07 Al 0.19[d] PO_4 0.10	47[f]	18	24	1	70		
6/2 0840		48	9.5	82	44.0	7.2	0.44[c]		2.0/0.09		0.0/0.00	22/0.36		0.2/0.01			0.4			33[e]	17	22	4	60		
7/6 0830		57	8.1	78	95.2	7.5	0.70[c]		5.3/0.23		0.0/0.00	54/0.89		1.4/0.04			0.1			72[e]	25	35	0	2		
8/10 1040		65	7.8	82	93.3	7.7	0.71[c]		5.2/0.23		0.0/0.00	54/0.89		0.5/0.01			0.0			71[e]	24	36	0	3		
9/13 0715	30 M.D.	55	8.6	81	162	7.7	16/0.80	4.9/0.40	10/0.44	1.9/0.05	0.0/0.00	83/1.36	10/0.21	4.0/0.11	0.1/0.00	0.1/0.01	0.2	23	Fe 0.04 Al 0.08[d] PO_4 0.10 As 0.01	111[f]	26	60	0	8		
10/6 0745	33 M.D.	55	8.7	82	156	7.5	1.10[c]		10/0.44		0.0/0.00	79/1.29		2.3/0.06			0.2			118[e]	29	55	0	10		
11/2 0905	38 M.D.	43	10.0	80	152	7.5	1.03[c]		13/0.57		0.0/0.00	75/1.23		13/0.37			0.2			115[e]	36	52	0	1		
12/7 1300	55	32	11.7	80	213	7.5	1.88[c]		13/0.57		0.0/0.00	116/1.90		7.5/0.21			0.2			161[e]	23	94	0	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B-5
ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

CARSON RIVER, WEST FORK AT WOODFORDS (STA. 115a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/5 0950	16	32	11.4	78	78.4	7.3	0.56[c]		4.3 / 0.19		0.0 / 0.00	42 / 0.69		0.8 / 0.02			0.0			67[e]	25	28	0	2	Maximum 230 Minimum 0.06 Median 5	
2/10 1215	21	34	11.3	79		7.3	Sample broken in transit.																			
3/2 1010	23	33	11.2	78	80.9	7.3	0.66[c]		4.1 / 0.18		0.0 / 0.00	41 / 0.67		6.0 / 0.17			0.0			69[e]	21	33	0	1		
4/7 0915	280	37	10.7	79	45.0	7.1	0.36[c]		1.8 / 0.08		0.0 / 0.00	23 / 0.38		2.0 / 0.06			0.0			38[e]	17	17	0	14		
5/12 0700	259	42	10.0	79	41.5	7.2	4.8 / 0.24	1.0 / 0.08	1.2 / 0.05	0.6 / 0.02	0.0 / 0.00	22 / 0.36	1.0 / 0.02	1.0 / 0.03	0.7 / 0.01	0.2 / 0.01	0.0	13	Fe 0.06 Al 0.13[d] PO_4 0.05	35[f]	13	16	0	25		
6/2 0730	169	51	9.1	81	36.9	7.0	0.40[c]		1.0 / 0.04		0.0 / 0.00	20 / 0.33		0.0 / 0.00			0.0			31[e]	9	20	4	5		
7/6 0810	67	57	8.0	77	60.2	7.3	0.54[c]		1.7 / 0.07		0.0 / 0.00	35 / 0.57		1.1 / 0.03			0.0			51[e]	12	27	0	2		
8/10 1145	11	66	7.6	81	86.0	7.5	0.70[c]		3.7 / 0.16		0.0 / 0.00	51 / 0.84		0.1 / 0.00			0.0			73[e]	19	35	0	2		
9/13 0635	6.7	53	8.7	79	89.3	7.3	9.4 / 0.47	3.8 / 0.31	4.0 / 0.17	1.7 / 0.04	0.0 / 0.00	56 / 0.92	3.0 / 0.06	0.5 / 0.01	0.1 / 0.00	0.0 / 0.00	0.0	23	Al 0.03 PO_4 0.05[d]	74[f]	17	39	0	3		
10/6 0700	9.4	51	8.8	78	85.5	7.3	0.64[c]		4.4 / 0.19		0.0 / 0.00	47 / 0.77		1.0 / 0.03			0.0			73[e]	23	32	0	20		
11/2 0830	13	44	10.0	81	78.0	7.3	0.57[c]		5.0 / 0.22		0.0 / 0.00	46 / 0.75		0.0 / 0.00			0.0			67[e]	28	28	0	0.8		
12/7 1200	17	33	11.5	79	78.8	7.3	0.59[c]		4.1 / 0.18		0.0 / 0.00	48 / 0.79		0.5 / 0.01			0.1			67[e]	23	30	0	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc (TTL), or California Department of Water Resources (DWR); as indicated

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

LAKE TAHOE AT BIJOU (STA. 39)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1960																										USGS
1/5 0800		37	9.3	68	100	7.3	0.66[c]		6.8 / 0.30		0.0 / 0.00	50 / 0.82		2.8 / 0.08			0.1			67[e]	31	33	0	10	Maximum 130 Minimum <0.045 Median 0.06	
2/10 0830		32	9.9	68		7.0	Sample broken in transit																			
3/1 1450		40	9.9	76	93	7.3	0.66[c]		6.0 / 0.26		0.0 / 0.00	44 / 0.72		2.5 / 0.07			0.0			62[e]	28	33	0	1		
4/6 1045		50	9.5	84	90.1	7.3	0.64[c]		5.1 / 0.22		0.0 / 0.00	49 / 0.80		2.0 / 0.06			0.0			60[e]	26	32	0	15		
5/11 1030		55	8.8	83	86.8	7.5	8.0 / 0.40	2.4 / 0.20	5.3 / 0.23	1.7 / 0.04	0.0 / 0.00	45 / 0.74	3.0 / 0.06	2.0 / 0.06	0.0 / 0.00	0.0 / 0.00	0.0	13	PO_4 0.05 Cu 0.02[d]	57[f]	26	30	0	2		
6/1 0930		57	8.4	81	90.2	7.3	0.80[c]		5.2 / 0.23		0.0 / 0.00	53 / 0.87		2.8 / 0.08			0.0			60[e]	22	40	0	1		
7/5 1305		66	7.3	78	90.7	7.5	0.65[c]		6.2 / 0.27		0.0 / 0.00	52 / 0.85		2.0 / 0.06			0.0			61[e]	29	32	0	1		
8/9 1350		74	7.2	83	93.8	7.7	0.68[c]		6.6 / 0.29		0.0 / 0.00	54 / 0.89		3.5 / 0.10			0.0			63[e]	30	34	0	1		
9/12 1315		68	7.6	83	93.7	7.7	8.3 / 0.41	2.9 / 0.24	6.3 / 0.27	1.7 / 0.04	0.0 / 0.00	57 / 0.93	0.8 / 0.02	1.2 / 0.03	0.2 / 0.00	0.0 / 0.00	0.0	12	PO_4 0.00 As 0.01[d]	61[f]	28	32	0	3		
10/5 1400		60	8.0	80	95.3	7.5	0.70[c]		5.2 / 0.23		0.0 / 0.00	50 / 0.82		1.5 / 0.04			0.0			64[e]	25	35	0	5		
11/1 1430		55	8.6	81	96.0		0.68[c]		6.9 / 0.30		0.0 / 0.00	50 / 0.82		1.8 / 0.05			0.1			64[e]	31	34	0	1		
12/6 1530		38	9.7	72	94.8	7.3	0.70[c]		6.2 / 0.27		0.0 / 0.00	54 / 0.89		1.5 / 0.04			0.0			64[e]	28	35	0	8		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 5

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

LAKE TAHOE AT TAHOE CITY (STA. 38)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/4 1645		41	9.7	76	94	7.3	0.64[c]		6.0 / 0.26		0.0 / 0.00	50 / 0.82		2.5 / 0.07			0.0			63[e]	29	32	0	10	Maximum 6.2 Minimum <0.045 Median 0.23	
2/9 1500		33	8.9	62	124	6.9	1.04[c]		6.0 / 0.26		0.0 / 0.00	67 / 1.10		4.5 / 0.13			0.0			83[e]	20	52	0	30		
3/1 1120		39	9.9	75	92.6	7.2	0.66[c]		5.2 / 0.23		0.0 / 0.00	46 / 0.75		2.0 / 0.06			0.0			62[e]	26	33	0	1		
4/6 1245		55	9.6	90	95.7	6.7	0.72[c]		5.4 / 0.23		0.0 / 0.00	52 / 0.85		1.5 / 0.04			0.0			64[e]	24	36	0	15		
5/11 1245		54	9.5	88	93.0	7.7	9.6 / 0.48	1.9 / 0.16	5.4 / 0.23	1.8 / 0.05	0.0 / 0.00	55 / 0.90	1.0 / 0.02	1.2 / 0.03	0.0 / 0.00	0.0 / 0.00	0.0	12	PO_4 0.00[d]	60[f]	25	32	0	1		
6/1 1330		63	8.9	92	93.8	7.5	0.72[c]		5.3 / 0.23		0.0 / 0.00	54 / 0.89		2.0 / 0.06			0.0			63[e]	24	36	0	1		
7/5 1030		65	7.3	77	94.0	7.5	0.67[c]		6.2 / 0.27		0.0 / 0.00	53 / 0.87		2.5 / 0.07			0.0			63[e]	29	34	0	2		
8/9 1025		70	7.6	84	93.5	7.7	0.72[c]		6.4 / 0.28		0.0 / 0.00	54 / 0.89		2.5 / 0.07			0.0			63[e]	28	36	0	1		
9/12 1030		64	8.0	83	93.0	7.7	8.0 / 0.40	3.3 / 0.27	6.3 / 0.27	1.2 / 0.03	0.0 / 0.00	56 / 0.92	1.2 / 0.02	1.4 / 0.04	0.1 / 0.00	0.0 / 0.00	0.0	13	PO_4 0.00 Cu 0.01[d]	62[f]	28	33	0	6		
10/5 1200		63	8.3	86	93.4	7.7	0.70[c]		5.1 / 0.22		0.0 / 0.00	50 / 0.82		1.5 / 0.04			0.1			63[e]	24	35	0	5		
11/1 1230		56	8.5	81	94.5	7.5	0.72[c]		6.9 / 0.30		0.0 / 0.00	50 / 0.82		1.8 / 0.05			0.1			64[e]	29	36	0	1		
12/6 1225		39	10.5	80	95.2	7.5	0.68[c]		6.2 / 0.27		0.0 / 0.00	54 / 0.89		0.4 / 0.01			0.1			64[e]	28	34	0	17		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B-5

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

LAKE TAHOE AT TAHOE VISTA (STA. 37)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH [a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform [h] MPN/ml	Analyzed by [i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/4 1615		44	9.2	75	95.0	7.5	0.66 [c]		6.5 / 0.28		0.0 / 0.00	51 / 0.84		2.5 / 0.07			0.0			64 [e]	30	33	0	15	Maximum 0.62 Minimum <0.045 Median 0.06	
2/9 1545		40	10.0	77		7.3	Sample broken in transit																			
3/1 1200		41	10.0	78	100	7.4	0.74 [c]		5.6 / 0.24		0.0 / 0.00	56 / 0.92		1.8 / 0.05			0.0			68 [e]	24	37	0	3		
4/6 1200		48	9.5	82	94.1	7.3	0.68 [c]		5.3 / 0.23		0.0 / 0.00	51 / 0.84		1.5 / 0.04			0.0			64 [e]	25	34	0	15		
5/11 1200		53	9.3	85	91.2	7.5	9.2 / 0.46	2.2 / 0.18	5.1 / 0.22	1.8 / 0.05	0.0 / 0.00	55 / 0.90	1.0 / 0.02	1.5 / 0.04	0.0 / 0.00	0.0 / 0.00	0.0	13	Cu 0.01 PO_4 0.05 [d]	61 [f]	24	32	0	1		
6/1 1130		55	9.3	87	94.3	7.3	0.74 [c]		5.6 / 0.24		0.0 / 0.00	53 / 0.87		4.0 / 0.11			0.0			64 [e]	24	37	0	1		
7/5 1110		65	8.3	88	91.0	7.5	0.62 [c]		6.2 / 0.27		0.0 / 0.00	51 / 0.84		2.0 / 0.06			0.0			61 [e]	30	31	0	2		
8/9 1205		73	7.4	85	93.9	7.7	0.70 [c]		6.4 / 0.28		0.0 / 0.00	54 / 0.89		3.8 / 0.11			0.0			63 [e]	29	35	0	1		
9/12 1130		68	8.3	90	92.2	7.7	10 / 0.50	2.2 / 0.18	6.1 / 0.27	1.7 / 0.04	0.0 / 0.00	56 / 0.92	0.8 / 0.02	2.0 / 0.06	0.0 / 0.00	0.0 / 0.00	0.0	13	Cu 0.01 As 0.01 [d] PO_4 0.00	64 [f]	27	34	0	2		
10/5 1230		63	8.0	83	95.3	7.5	0.72 [c]		5.0 / 0.22		0.0 / 0.00	49 / 0.80		1.8 / 0.05			0.1			64 [e]	23	36	0	5		
11/1 1200		56	9.0	85	93.2	7.5	0.68 [c]		6.4 / 0.28		0.0 / 0.00	49 / 0.80		2.2 / 0.06			0.1			63 [e]	29	34	0	1		
12/6 1345		39	10.6	80	96.0	7.4	0.72 [c]		6.2 / 0.27		0.0 / 0.00	54 / 0.89		1.8 / 0.05			0.1			65 [e]	27	36	0	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 5

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

SUSAN RIVER AT SUSANVILLE (STA. 17b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/7 1045	9.5	34	12.5	88	171	7.3	1.52[c]		5.5 / 0.24		0.0 / 0.00	106 / 1.74		2.0 / 0.06			0.0			129[e]	14	76	0	1	Median 6.2	
2/11 1210	52	35	11.7	84	107	7.3	1.02[c]		3.6 / 0.16		0.0 / 0.00	62 / 1.02		1.5 / 0.04			0.0			81[e]	14	51	0	35	Maximum 620.	
3/11 1235	99	39	11.1	84	97.8	7.3	0.84[c]		3.5 / 0.15		0.0 / 0.00	52 / 0.85		1.5 / 0.04			0.1			74[e]	15	42	0	350	Minimum 0.21	
4/14 0750	99	45	10.4	86	88.8	7.3	0.80[c]		2.9 / 0.13		0.0 / 0.00	54 / 0.89		1.0 / 0.03			0.0			67[e]	14	40	0	0.4		
5/12 0710	66	50	9.1	80	81.0	7.3	8.1 / 0.40	4.1 / 0.34	2.7 / 0.12	0.7 / 0.02	0.0 / 0.00	51 / 0.84	0.6 / 0.01	0.6 / 0.02	0.2 / 0.00	0.1 / 0.01	0.1	22	Fe 0.05 PO_4 0.10[d] Al 0.05 Zn 0.01	64[f]	14	37	0	1		
6/9 0650	134	60	8.3	83	58.9	7.3	0.58[c]		1.7 / 0.07		0.0 / 0.00	37 / 0.61		2.8 / 0.08			0.0			44[e]	11	29	0	7		
7/7 1450	4.4	77	7.0	83	160	7.7	1.60[c]		4.7 / 0.20		0.0 / 0.00	107 / 1.75		0.2 / 0.01			0.0			121[e]	11	80	0	15		
8/11 1420	1.1	73	7.3	84	202	7.5	1.88[c]		6.9 / 0.30		0.0 / 0.00	135 / 2.21		0.5 / 0.01			0.0			153[e]	14	94	0	30		
9/9 0555	2.5	58	7.8	76	196	7.5	18 / 0.90	12 / 0.99	8.0 / 0.35	2.4 / 0.06	0.0 / 0.00	131 / 2.15	1.0 / 0.02	1.5 / 0.04	0.0 / 0.00	0.0 / 0.00	0.1	36	Fe 0.10 Al 0.04[d] PO_4 0.10	144[f]	15	94	0	5		
10/13 1355	5.1	49	9.6	84	188	7.5	1.78[c]		6.5 / 0.28		0.0 / 0.00	120 / 1.97		0.5 / 0.01			0.0			142[e]	14	89	0	4		
11/10 1415	6.2	41	10.7	84	180	7.5	1.66[c]		4.4 / 0.19		0.0 / 0.00	111 / 1.82		0.8 / 0.02			0.0			136[e]	10	83	0	1		
12/15 1510	13	33	12.3	85	158	7.4	1.44[c]		5.6 / 0.24		0.0 / 0.00	98 / 1.61		2.0 / 0.06			0.0			119[e]	14	72	0	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE B - 5

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

TRUCKEE RIVER NEAR FARAD (STA. 53)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH [a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform [h] MPN/ml	Analyzed by [i]
1960																										USGS
1/4 1345	324	32	11.5	79	107	7.5	0.76/0.76 [c]		7.0/0.30		0.0/0.00	59/0.97		2.0/0.06			0.1			81 [e]	28	38	0	10	Maximum 230 Minimum 0.06 Median 2.3	
2/9 0900	812	32	11.9	81		7.0	Sample broken in transit																			
3/1 1000	386	36	11.3	82	108	7.3	0.76/0.76 [c]		5.5/0.24		0.0/0.00	54/0.89		3.5/0.10			0.0			82 [e]	24	38	0	3		
4/6 1430	868	46	10.2	85	63.6	7.1	0.50/0.50 [c]		2.3/0.10		0.0/0.00	31/0.51		2.0/0.06			0.1			48 [e]	17	25	0	25		
5/11 1400	986	50	9.1	80	53.3	7.3	5.6/0.28	1.9/0.16	2.0/0.09	0.8/0.02	0.0/0.00	26/0.43	3.0/0.06	0.8/0.02	0.0/0.00	0.0/0.00	0.0	15	Fe 0.02 Cu 0.01 [d] PO_4 0.05	42 [f]	16	22	1	8		
6/1 1520	912	57	8.6	83	51.1	7.3	0.44/0.44 [c]		2.1/0.09		0.0/0.00	28/0.46		2.8/0.08			0.0			39 [e]	17	22	0	2		
7/5 0900	618	56	8.2	78	66.0	7.3	0.54/0.54 [c]		2.6/0.11		0.0/0.00	38/0.62		1.8/0.05			0.1			50 [e]	17	27	0	3		
8/9 0820	618	65	7.9	83	97.0	7.5	0.76/0.76 [c]		6.5/0.28		0.0/0.00	56/0.92		4.0/0.11			0.1			74 [e]	27	38	0	5		
9/12 0835	521	61	8.0	80	96.3	7.6	10/0.50	3.6/0.30	6.5/0.28	1.5/0.04	0.0/0.00	49/0.80	7.0/0.15	5.5/0.16	0.1/0.00	0.1/0.01	0.0	17	Al 0.10 Zn 0.04 [d] PO_4 0.05	75 [f]	25	40	0	1		
10/5 1015	408	56	8.8	84	102	7.5	0.76/0.76 [c]		5.3/0.23		0.0/0.00	54/0.89		2.4/0.07			0.0			78 [e]	23	38	0	10		
11/1 0950	221	47	9.6	81	110	7.3	0.84/0.84 [c]		7.3/0.32		0.0/0.00	61/1.00		1.8/0.05			0.1			84 [e]	28	42	0	2		
12/6 0955	296	32	12.1	83	103	7.4	0.78/0.78 [c]		6.0/0.26		0.0/0.00	53/0.87		2.2/0.06			0.0			78 [e]	25	39	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 5
ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

TRUCKEE RIVER NEAR TRUCKEE (STA. 52)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1960																										USGS
1/4 1500	246	37	10.6	78	98.0	7.1	0.68[c]		6.6 / 0.29		0.0 / 0.00	49 / 0.80		2.2 / 0.06			0.1			70[e]	30	34	0	10	Maximum 23 Minimum 0.06 Median 1.3	
2/9 1210	232	32	10.9	74		7.0	Sample broken in transit																			
3/1 1050	306	38	10.3	77	102	7.3	0.72[c]		5.2 / 0.23		0.0 / 0.00	50 / 0.82		2.5 / 0.07			0.0			73[e]	24	36	0	1		
4/6 1345	272	48	10.5	90	66.3	7.9	0.56[c]		2.1 / 0.09		0.0 / 0.00	28 / 0.46		1.5 / 0.04			0.1			47[e]	14	28	5	15		
5/11 1320	232	52	9.5	86	53.0	7.3	6.4 / 0.32	1.5 / 0.12	1.9 / 0.08	0.7 / 0.02	0.0 / 0.00	24 / 0.39	3.0 / 0.06	2.5 / 0.07	0.0 / 0.00	0.0 / 0.00	0.0	13	Fe 0.02 PO_4 0.05[d]	41[f]	15	22	2	12		
6/1 1420	246	58	8.7	84	45.3	7.2	0.44[c]		1.5 / 0.07		0.0 / 0.00	23 / 0.38		2.5 / 0.07			0.0			32[e]	14	22	3	2		
7/9 0950	33	60	8.5	85	97.0	7.5	0.75[c]		4.8 / 0.21		0.0 / 0.00	44 / 0.72		4.5 / 0.13			0.0			69[e]	22	38	2	1		
8/9 0925	510	66	7.4	79	96.9	7.5	0.78[c]		6.5 / 0.28		0.0 / 0.00	54 / 0.89		5.0 / 0.14			0.0			69[e]	26	39	0	1		
9/12 0940	474	62	7.9	80	95.2	7.5	9.2 / 0.46	2.2 / 0.18	6.3 / 0.27	4.3 / 0.11	0.0 / 0.00	57 / 0.93	1.2 / 0.02	1.6 / 0.05	0.0 / 0.00	0.1 / 0.01	0.0	13	As 0.01 PO_4 0.00[d]	66[f]	26	32	0	4		
10/5 1100	355	60	8.3	83	97.4	7.5	0.72[c]		5.3 / 0.23		0.0 / 0.00	50 / 0.82		1.8 / 0.05			0.1			70[e]	24	36	0	10		
11/1 1105	188	51	9.1	81	98.9	7.5	0.68[c]		6.6 / 0.29		0.0 / 0.00	51 / 0.84		1.8 / 0.05			0.1			71[e]	30	34	0	2		
12/6 1125	188	33	11.8	82	101	7.3	0.74[c]		6.0 / 0.26		0.0 / 0.00	52 / 0.85		1.5 / 0.04			0.2			72[e]	26	37	0	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B-5

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

WALKER RIVER, EAST NEAR BRIDGEPORT (STA. 116a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[1]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/5 1310	2.5	40	8.9	69	213	7.5[a]	1.64[c]		14 / 0.61		0.0 / 0.00	110 / 1.80		2.8 / 0.08			0.1			140[e]	27	82	0	17	Maximum 2,400 Minimum 0.045 Median 1.3	
2/11 0850	2.5	39			234	7.5[b]	1.76[c]		15 / 0.65		0.0 / 0.00	122 / 2.00		3.0 / 0.08			0.0			154[e]	27	88	0	35		
3/2 1430	2.5	45	11.0	91	351	7.5[a]	1.94[c]		37 / 1.61		0.0 / 0.00	132 / 2.16		16 / 0.45			0.3			231[e]	45	97	0	10		
4/7 1250	60	53	8.8	81	226	7.9[a]	1.46[c]		18 / 0.78		0.0 / 0.00	79 / 1.29		4.5 / 0.13			0.1			149[e]	35	73	8	7.5		
5/12 1045	176	58	7.6	74	234	7.9[a]	24 / 1.20	6.3 / 0.52	19 / 0.83	5.3 / 0.14	0.0 / 0.00	123 / 2.02	25 / 0.52	4.5 / 0.13	0.8 / 0.01	0.3 / 0.02	0.0	21	Fe 0.06 Al 0.19 PO_4 0.15 [d]	167[f]	31	86	0	60		
6/2 1200	164	57	7.8	75	239	7.7[a]	1.62[c]		18 / 0.78		0.0 / 0.00	121 / 1.98		2.0 / 0.06			0.1			158[e]	32	81	0	10		
7/6 1050	108	66	6.5	69	215	8.1[a]	1.52[c]		14 / 0.61		0.0 / 0.00	115 / 1.88		3.2 / 0.09			0.1			142[e]	29	76	0	6		
8/10 0630	154	68	5.1	56	223	8.1[a]	1.60[c]		15 / 0.65		0.0 / 0.00	128 / 2.10		0.2 / 0.01			0.1			147[e]	29	80	0	12		
9/13 1100	40	68	5.5	60	200	7.3[a]	20 / 1.00	5.4 / 0.44	14 / 0.61	3.0 / 0.08	0.0 / 0.00	104 / 1.70	15 / 0.31	2.2 / 0.06	3.4 / 0.05	0.1 / 0.01	0.1	27	Fe 0.11 PO_4 0.50 Al 0.09 As 0.01 [d]	141[f]	29	72	0	70		
10/6 1015	36	55	8.4	79	193	7.5[a]	1.26[c]		14 / 0.61		0.0 / 0.00	94 / 1.54		4.0 / 0.11			0.1			127[e]	33	63	0	100		
11/2 1140	27	48	9.8	84	177	7.7[a]	1.22[c]		13 / 0.57		0.0 / 0.00	90 / 1.48		6.2 / 0.17			0.0			117[e]	32	61	0	30		
12/7 0740	5.4	36	9.2	67	354	7.3[a]	1.98[c]		38 / 1.65		0.0 / 0.00	154 / 2.52		10 / 0.28			0.4			233[e]	45	99	0	15		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

: Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE B - 5
ANALYSES OF SURFACE WATER
LAHONTAN REGION (NO. 6)
WALKER RIVER, WEST NEAR COLEVILLE (STA. 116)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1960																										USGS
1/5 1210	30	33	11.0	76	204	7.5	1.12[c]		24 / 1.04		0.0 / 0.00	100 / 1.64		6.0 / 0.17			0.3			138[e]	48	56	0	2	Maximum 620 Minimum 0.02 Median 1.3	
2/10 1645	64	32	11.1	76		7.4	Sample broken in transit																			
3/2 1230	68	36	11.0	80	151	7.3	1.16[c]		11 / 0.48		0.0 / 0.00	76 / 1.25		6.5 / 0.18			0.1			102[e]	29	58	0	2		
4/7 1145	310	43	10.1	81	51.8	7.3	0.39[c]		2.0 / 0.09		0.0 / 0.00	25 / 0.41		2.0 / 0.06			0.1			35[e]	19	19	0	10		
5/12 0930	785	43	9.6	77	31.0	7.1	4.0 / 0.20	0.7 / 0.06	1.0 / 0.04	0.5 / 0.01	0.0 / 0.00	15 / 0.25	1.0 / 0.02	1.2 / 0.03	0.7 / 0.01	0.1 / 0.01	0.1	4.9	Fe 0.04 PO_4 0.10 Al 0.17 Zn 0.02[d]	21[f]	13	13	1	25		
6/2 1015	946	50	9.0	79	58.8	7.3	0.46[c]		4.3 / 0.19		0.0 / 0.00	29 / 0.48		0.5 / 0.01			0.0			40[e]	29	23	0	30		
7/6 0940	138	54	8.3	77	66.4	7.3	0.53[c]		3.5 / 0.15		0.0 / 0.00	39 / 0.64		0.4 / 0.01			0.1			45[e]	22	27	0	1		
8/10 0830	49	60	8.1	81	155	7.7	0.96[c]		14 / 0.61		0.0 / 0.00	82 / 1.34		2.6 / 0.07			0.1			105[e]	39	48	0	3		
9/13 0900	25	58	8.5	83	122	7.5	12 / 0.60	4.9 / 0.40	6.4 / 0.28	1.2 / 0.03	0.0 / 0.00	73 / 1.20	6.0 / 0.12	1.2 / 0.03	0.1 / 0.00	0.1 / 0.01	0.1	15	Al 0.04 PO_4 0.10[d]	83[e]	21	50	0	6		
10/6 0910	26	53	8.8	81	195	7.7	1.00[c]		21 / 0.91		0.0 / 0.00	92 / 1.51		5.0 / 0.14			0.2			132[e]	48	50	0	10		
11/2 1040	23	46	9.8	82	194	7.7	1.00[c]		23 / 1.00		0.0 / 0.00	94 / 1.54		2.3 / 0.06			0.2			131[e]	50	50	0	1		
12/7 1000	25 M.D.	33	10.7	74	187	7.3	1.28[c]		21 / 0.91		0.0 / 0.00	122 / 2.00		5.8 / 0.16			0.2			126[e]	42	64	0	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

RADIOASSAY OF SURFACE WATERS

NORTH COASTAL REGION (NO. 1)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
1	Klamath River	Copco	5-4	2.63 ± 4.16	3.75 ± 4.20	0.15 ± 0.25	0.08 ± 0.28
			9-7	5.9 ± 4.2	0.0 ± 4.0	0.00 ± 0.18	0.39 ± 0.38
1a	Shasta River	Yreka	5-4	4.87 ± 4.21	8.30 ± 4.30	0.08 ± 0.28	0.23 ± 0.28
			9-6	5.4 ± 3.8	0.0 ± 3.9	0.23 ± 0.39	0.23 ± 0.34
1b	Scott River	Fort Jones	5-4	6.31 ± 4.18	9.15 ± 4.25	0.08 ± 0.32	0.17 ± 0.29
			9-6	2.18 ± 3.9	0.0 ± 3.9	0.09 ± 0.34	0.28 ± 0.46
1c	Klamath River	above Hamburg	5-4	3.14 - 4.26	4.92 - 4.30	0.26 - 0.38	0.17 - 0.29
			9-6	6.8 - 4.2	0.0 - 4.0	0.00 - 0.43	0.18 - 0.48
1d	Butte Creek	Macdoel	5-3	0.00 ± 4.26	0.37 ± 4.36	0.09 ± 0.43	0.44 ± 0.56
			9-7	3.6 ± 3.9	0.0 ± 3.7	0.00 ± 0.35	0.00 ± 0.33
1e	Antelope Creek	Tennant	5-3	0.00 ± 4.21	9.13 ± 4.45	0.35 ± 0.35	0.26 ± 0.43
			9-7	1.0 ± 3.7	0.0 ± 3.6	0.16 ± 0.27	0.00 ± 0.30
2	Klamath River	Somesbar	5-2	0.10 ± 4.21	4.76 ± 4.35	0.16 ± 0.34	0.42 ± 0.49
			9-15	3.1 ± 4.0	0.0 ± 3.9	0.33 ± 0.43	0.25 ± 0.36
2a	Salmon River	Somesbar	5-2	0.00 ± 4.21	3.99 ± 4.30	0.25 ± 0.36	0.25 ± 0.31
			9-15	0.0 ± 4.0	0.0 ± 4.1	0.08 ± 0.41	0.33 ± 0.43
2b	Klamath River	Happy Camp	5-4	0.00 ± 4.16	6.65 ± 4.40	0.15 ± 0.44	0.46 ± 0.47
			9-6	3.3 ± 4.1	0.3 ± 4.0	0.16 ± 0.36	0.39 ± 0.46
3	Klamath River	Klamath	5-3	6.20 ± 4.28	7.24 ± 4.32	0.08 ± 0.28	0.46 ± 0.47
			9-14	7.5 ± 4.2	0.9 ± 4.0	0.00 ± 0.32	0.47 ± 0.45
3a	Smith River	Crescent City	5-3	4.10 ± 2.91	2.55 ± 2.89	0.26 ± 0.33	0.18 ± 0.29
			9-14	2.5 ± 3.7	1.2 ± 3.7	0.00 ± 0.38	0.70 ± 0.54

TABLE B - 6

RADIOASSAY OF SURFACE WATERS

NORTH COASTAL REGION (NO. 1)
(continued)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
3b	Redwood Creek	Orick	5-3	0.00 ± 2.75	0.50 ± 2.78	0.35 ± 0.50	0.44 ± 0.48
			9-14	2.2 ± 3.7	0.0 ± 3.6	0.35 ± 0.46	0.26 ± 0.43
4	Trinity River	Hoopa	5-2	0.00 ± 2.76	0.40 ± 2.78	0.08 ± 0.42	0.51 ± 0.52
			9-15	7.5 ± 3.7	0.3 ± 3.5	0.16 ± 0.32	0.32 ± 0.45
4a	Trinity River	Lewiston	5-1	0.66 ± 2.93	0.00 ± 2.90	0.34 ± 0.39	0.34 ± 0.39
			9-16	8.9 ± 3.6	4.5 ± 3.5	0.00 ± 0.37	0.64 ± 0.45
4b	Trinity River	Burnt Ranch	5-2	0.00 ± 2.90	0.00 ± 2.94	0.33 ± 0.51	0.41 ± 0.53
			9-15	5.5 ± 3.5	1.2 ± 3.5	0.00 ± 0.41	0.41 ± 0.36
5	Eel River	McCann	5-4	0.90 ± 2.74	0.83 ± 2.74	0.33 ± 0.43	0.08 ± 0.41
			9-13	2.5 ± 3.7	0.0 ± 3.6	0.00 ± 0.38	0.66 ± 0.47
5a	Van Duzen River	Bridgeville	5-6	1.19 ± 2.54	0.00 ± 2.49	0.23 ± 0.33	0.38 ± 0.38
			9-14	4.8 ± 3.7	0.0 ± 3.5	0.24 ± 0.35	0.40 ± 0.47
5b	Outlet Creek	above Eel River	5-5	1.65 ± 2.60	0.53 ± 2.56	0.15 ± 0.25	0.46 ± 0.40
			9-13	0.0 ± 3.6	0.0 ± 3.6	0.40 ± 0.43	0.48 ± 0.37
5c	Eel River, Middle Fork	Etsel Reservoir site	5-5	0.29 ± 2.67	0.00 ± 2.67	0.25 ± 0.37	0.34 ± 0.44
			9-13	4.2 ± 3.7	0.0 ± 3.5	0.00 ± 0.33	0.62 ± 0.52
5d	Eel River	Willis Ridge Reservoir site	5-5	3.03 ± 2.76	1.65 ± 2.75	0.17 ± 0.44	0.30 ± 0.42
			9-13	6.3 ± 3.6	2.7 ± 3.5	0.18 ± 0.41	0.53 ± 0.50
6	Eel River	Scotia	5-4	3.05 ± 3.50	0.00 ± 3.39	0.00 ± 0.32	0.80 ± 0.39
			9-13	1.2 ± 3.6	0.0 ± 3.5	0.25 ± 0.50	0.42 ± 0.50
6a	Mad River	Arcata	5-3	1.60 ± 3.06	2.87 ± 3.06	0.24 ± 0.39	0.33 ± 0.37
			9-15	0.0 ± 3.6	0.0 ± 3.5	0.00 ± 0.31	0.00 ± 0.58

TABLE B - 6

RADIOASSAY OF SURFACE WATERS

NORTH COASTAL REGION (NO. 1)
(continued)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
7	Eel River, South Fork	Miranda	5-5	0.00 ± 3.09	2.84 ± 3.17	0.08 ± 0.30	0.08 ± 0.30
			9-13	0.0 ± 3.7	0.0 ± 3.6	0.50 ± 0.43	0.17 ± 0.34
7a	Mattole River	Petrolia	5-4	0.20 ± 3.14	1.44 ± 3.16	0.16 ± 0.33	0.16 ± 0.33
			9-14	0.0 ± 3.8	0.0 ± 3.7	0.17 ± 0.43	0.42 ± 0.41
8a	Russian River	Hopland	5-11	3.62 ± 3.26	5.69 ± 3.18	0.00 ± 0.22	0.00 ± 0.28
			9-14	0.0 ± 3.8	0.0 ± 3.7	0.31 ± 0.26	0.31 ± 0.32
8b	Navarro River	Navarro	5-6	1.29 ± 3.06	2.09 ± 3.08	0.08 ± 0.33	0.22 ± 0.28
			9-12	6.0 ± 3.8	1.9 ± 3.7	0.16 ± 0.32	0.55 ± 0.43
8c	Big River	Mouth	5-6	0.00 ± 2.83	0.05 ± 2.97	0.82 ± 0.30	0.41 ± 0.49
			9-12	6.5 ± 3.8	0.6 ± 3.6	0.00 ± 0.41	0.35 ± 0.46
9	Russian River	Healdsburg	5-9	0.00 ± 2.86	1.65 ± 2.93	0.82 ± 0.36	0.65 ± 0.38
			9-14	3.0 ± 3.8	0.0 ± 3.7	0.18 ± 0.29	0.80 ± 0.60
9a	Gualala River, South Fork	Annapolis	5-10	7.60 ± 3.12	3.18 ± 3.00	0.23 ± 0.46	0.54 ± 0.46
			9-12	4.2 ± 3.9	0.9 ± 3.7	0.25 ± 0.37	0.25 ± 0.46
10	Russian River	Guerneville	5-9	5.07 ± 3.08	4.88 ± 3.07	0.00 ± 0.36	0.23 ± 0.49
			9-15	3.1 ± 3.8	2.2 ± 3.8	0.42 ± 0.41	0.17 ± 0.28
10a	Russian River, East Fork	Potter Valley Powerhouse	5-11	0.00 ± 3.56	0.00 ± 3.49	0.16 ± 0.37	0.16 ± 0.46
			9-14	1.7 ± 4.3	1.7 ± 4.3	0.33 ± 0.43	0.41 ± 0.45
10c	Noyo River	Fort Bragg	5-6	3.16 ± 3.79	0.00 ± 3.71	0.00 ± 0.23	0.16 ± 0.32
			9-12	2.4 ± 4.1	0.4 ± 4.1	0.16 ± 0.38	0.50 ± 0.43

TABLE B - 7

RADIOASSAY OF SURFACE WATERS

SAN FRANCISCO BAY REGION (NO. 2)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
71	Arroyo Del Valle	VA Hospital	5-3	0.62 ± 3.85	0.00 ± 3.71	0.08 ± 0.33	0.53 ± 0.52
72	Napa River	St. Helena	5-11	2.59 ± 3.87	0.00 ± 3.79	0.17 ± 0.40	0.00 ± 0.31
			9-15	2.4 ± 4.2	0.0 ± 4.1	0.48 ± 0.50	0.08 ± 0.30
73	Alameda Creek	Niles	5-3	0.00 ± 3.74	0.67 ± 3.82	0.08 ± 0.46	0.17 ± 0.52
			9-6	2.5 ± 4.1	0.0 ± 4.0	0.00 ± 0.42	0.32 ± 0.50
74	Los Gatos Creek	Los Gatos	5-3	0.00 ± 3.75	0.00 ± 3.72	0.17 ± 0.39	0.17 ± 0.39
			9-6	6.9 ± 4.1	0.9 ± 4.0	0.35 ± 0.45	0.60 ± 0.47
82	Coyote Creek	Madrone	5-4	1.11 ± 3.56	1.34 ± 3.56	0.00 ± 0.39	0.22 ± 0.41
			9-6	4.1 ± 4.0	1.0 ± 4.0	0.35 ± 0.45	0.17 ± 0.40

TABLE B - 6

RADIOASSAY OF SURFACE WATERS

CENTRAL COASTAL REGION (NO. 3)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
43	Salinas River	Spreckles	5-4	0.95 ± 3.43	0.00 ± 3.39	0.00 ± 0.30	0.45 ± 0.50
			9-7	3.8 ± 4.0	0.0 ± 3.7	0.25 ± 0.41	0.33 ± 0.39
75	San Lorenzo River	Big Trees Park	5-3	1.13 ± 3.11	0.00 ± 3.06	0.23 ± 0.34	0.15 ± 0.51
			9-6	1.3 ± 3.6	0.0 ± 3.6	0.16 ± 0.31	0.55 ± 0.39
76	Soquel Creek	Soquel	5-3	0.00 ± 3.01	0.13 ± 3.01	0.39 ± 0.42	0.00 ± 0.18
			9-6	5.8 ± 3.7	1.3 ± 3.5	0.00 ± 0.32	0.53 ± 0.54
77	Pajaro River	Chittenden	5-4	3.96 ± 3.16	0.57 ± 3.09	0.38 ± 0.33	0.30 ± 0.35
			9-7	2.2 ± 3.7	0.2 ± 3.6	0.17 ± 0.35	0.61 ± 0.52
77a	San Benito River	Bear Valley Fire Station	5-4	3.84 ± 3.39	4.16 ± 3.27	0.23 ± 0.38	0.38 ± 0.41
			9-7	0.8 ± 3.7	0.2 ± 3.7	0.08 ± 0.42	0.00 ± 0.31
83	Carmel River	Robles Del Rio	5-4	4.24 ± 3.23	0.00 ± 3.16	0.08 ± 0.45	0.41 ± 0.52
96	Uvas Creek	Morgan Hill	5-4	2.30 ± 3.39	0.00 ± 3.33	0.16 ± 0.43	0.41 ± 0.49
			9-6	0.6 ± 3.8	0.0 ± 3.7	0.08 ± 0.37	0.00 ± 0.42

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
11	Sacramento River	Delta	5-2	2.41 ± 3.18	4.40 ± 3.23	0.00 ± 0.22	0.08 ± 0.38
			9-6	1.9 ± 3.8	3.8 ± 3.9	0.34 ± 0.39	0.67 ± 0.55
11a	Cottonwood Creek below North Fork		5-5	0.00 ± 3.86	1.77 ± 3.79	0.15 ± 0.36	0.31 ± 0.44
			9-5	1.5 ± 3.9	1.3 ± 3.9	0.17 ± 0.28	0.34 ± 0.39
11b	South Fork Cottonwood Creek above Cottonwood Creek		5-5	2.63 ± 3.84	1.93 ± 3.81	0.15 ± 0.40	0.23 ± 0.46
12	Sacramento River	Keswick	5-11	1.66 ± 4.20	0.00 ± 4.09	0.08 ± 0.33	0.46 ± 0.47
			9-5	0.3 ± 3.9	1.1 ± 4.0	0.50 ± 0.48	0.08 ± 0.31
12b	Cottonwood Creek	Cottonwood	5-10	1.10 ± 4.21	1.47 ± 4.22	0.08 ± 0.28	0.38 ± 0.34
			9-5	4.2 ± 4.0	1.8 ± 3.9	0.09 ± 0.32	0.18 ± 0.35
12c	Sacramento River	Red Bluff	5-10	3.70 ± 4.10	6.06 ± 4.19	0.24 ± 0.48	0.49 ± 0.57
			9-13	0.0 ± 3.9	0.5 ± 4.0	0.16 ± 0.38	0.24 ± 0.35
12d	Clear Creek	Igo	5-5	2.60 ± 4.15	6.04 ± 4.24	0.24 ± 0.44	0.24 ± 0.40
			9-5	0.0 ± 4.0	0.2 ± 4.0	0.09 ± 0.25	0.09 ± 0.32
13	Sacramento River	Hamilton City	5-9	5.82 ± 3.88	4.70 ± 3.85	0.23 ± 0.34	0.47 ± 0.51
			9-12	1.2 ± 4.0	0.0 ± 4.0	0.08 ± 0.23	0.16 ± 0.38
13a	Stony Creek	Hamilton City	5-9	2.25 ± 3.35	2.42 ± 3.35	0.23 ± 0.42	0.15 ± 0.31
13b	Sacramento River	Colusa	5-4	3.43 ± 3.27	3.95 ± 3.29	0.47 ± 0.37	0.39 ± 0.29
			9-13	0.0 ± 4.0	2.6 ± 4.1	0.00 ± 0.26	0.08 ± 0.29
13c	Stony Creek below Orland Diversion Dam		5-9	4.56 ± 3.29	3.86 ± 3.02	0.08 ± 0.34	0.23 ± 0.29
			9-12	1.9 ± 3.9	2.3 ± 3.9	0.26 ± 0.37	0.56 ± 0.47

TABLE B - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
13d	Thomes Creek	Paskenta	5-9	0.54 ± 3.15	3.33 ± 3.21	0.38 ± 0.33	0.23 ± 0.33
			9-12	5.0 ± 4.0	0.8 ± 3.9	0.00 ± 0.36	0.00 ± 0.42
13e	Elder Creek	Paskenta	5-9	5.12 ± 3.34	3.41 ± 3.31	0.15 ± 0.36	0.00 ± 0.21
			9-12	3.1 ± 3.9	0.7 ± 3.9	0.09 ± 0.26	0.00 ± 0.15
14	Sacramento River	Knights Landing	5-9	12.48 ± 3.65	4.62 ± 3.41	0.32 ± 0.47	0.24 ± 0.45
14a	Sacramento Slough	Knights Landing	5-9	3.97 ± 3.61	3.16 ± 3.60	0.41 ± 0.45	0.00 ± 0.27
			9-15	2.8 ± 3.9	1.4 ± 3.9	0.42 ± 0.42	0.00 ± 0.28
14b	Sacramento River above Colusa Trough		9-15	3.2 ± 3.9	3.1 ± 3.9	0.17 ± 0.28	0.00 ± 0.34
15	Sacramento River	Sacramento	5-2	6.79 ± 3.69	5.85 ± 3.68	0.23 ± 0.49	0.70 ± 0.61
15b	Sacramento River	Freeport	9-5	1.9 ± 3.9	0.0 ± 3.7	0.25 ± 0.42	0.68 ± 0.48
16	Sacramento River	Rio Vista	5-2	0.00 ± 3.16	0.00 ± 3.17	0.00 ± 0.31	0.15 ± 0.44
			9-5	0.1 ± 3.7	3.8 ± 3.8	0.17 ± 0.28	0.25 ± 0.37
16a	Calaveras River	Jenny Lind	5-2	1.39 ± 2.91	0.21 ± 2.88	0.16 ± 0.45	0.55 ± 0.50
16b	Calaveras River	Stockton	9-6	3.5 ± 3.9	0.0 ± 3.7	0.16 ± 0.37	0.47 ± 0.48
17	Pit River	Montgomery Creek	5-10	3.00 ± 3.05	1.29 ± 3.01	0.16 ± 0.18	0.47 ± 0.45
			9-8	0.5 ± 3.8	0.0 ± 3.7	0.24 ± 0.34	0.00 ± 0.26
17a	Pit River	Canby	5-11	5.69 ± 3.60	0.81 ± 3.46	0.08 ± 0.38	0.31 ± 0.40
			9-8	4.8 ± 3.7	0.7 ± 3.6	0.27 ± 0.39	0.27 ± 0.49

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
17d	Indian Creek	Crescent Mills	5-12	1.85 ± 3.68	0.00 ± 3.60	0.31 ± 0.36	0.00 ± 0.25
			9-9	2.3 ± 3.6	0.0 ± 3.5	0.09 ± 0.33	0.72 ± 0.42
17e	Pit River	Bieber	5-11	6.92 ± 2.86	2.95 ± 2.76	0.33 ± 0.51	0.17 ± 0.47
			9-8	9.2 ± 3.8	0.0 ± 3.5	0.25 ± 0.24	0.08 ± 0.24
18	McCloud River above Shasta Lake		5-2	4.16 ± 2.60	1.23 ± 2.51	0.50 ± 0.47	0.42 ± 0.49
			9-7	3.0 ± 3.8	1.4 ± 3.7	0.08 ± 0.31	0.08 ± 0.14
18a	Pit River, South Fork	Likely	5-11	1.15 ± 2.56	1.72 ± 2.56	0.08 ± 0.45	0.30 ± 0.43
			9-8	4.0 ± 4.0	0.7 ± 3.9	0.08 ± 0.24	0.76 ± 0.50
19	Feather River	Oroville	5-12	0.13 ± 2.76	0.00 ± 2.76	0.30 ± 0.35	0.08 ± 0.37
			9-9	0.0 ± 3.9	0.0 ± 3.8	0.08 ± 0.31	0.34 ± 0.44
20	Feather River	Nicolaus	5-9	3.33 ± 3.01	0.24 ± 2.90	0.08 ± 0.31	0.15 ± 0.40
			9-15	3.8 ± 4.3	1.0 ± 4.3	0.48 ± 0.45	0.40 ± 0.50
20a	Feather River	Shanghai Bend	5-9	3.75 ± 2.60	2.95 ± 2.57	0.31 ± 0.26	0.31 ± 0.36
			9-15	0.0 ± 4.2	0.0 ± 4.2	0.08 ± 0.23	0.16 ± 0.18
20b	Bear River	Mouth	5-9	2.28 ± 2.55	0.00 ± 2.48	0.00 ± 0.31	0.54 ± 0.55
21	Yuba River	Marysville	5-5	5.50 ± 2.71	1.69 ± 2.59	0.08 ± 0.22	0.39 ± 0.38
			9-14	0.9 ± 4.1	0.0 ± 4.1	0.45 ± 0.54	0.27 ± 0.45
21a	Yuba River	Smartville	5-5	0.67 ± 2.85	2.60 ± 2.90	0.67 ± 0.55	0.33 ± 0.51
			9-14	0.0 ± 4.0	0.0 ± 4.0	0.00 ± 0.42	0.09 ± 0.39
22	American River	Sacramento	5-6	4.99 ± 3.07	5.55 ± 3.08	0.00 ± 0.34	0.50 ± 0.51
			9-9	0.9 ± 4.3	2.7 ± 4.4	0.00 ± 0.28	0.25 ± 0.31

TABLE B - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
22a	American River	Nimbus Dam	5-6	3.86 ± 4.95	2.39 ± 2.88	0.08 ± 0.38	0.38 ± 0.45
			9-9	4.7 ± 4.4	0.0 ± 4.3	0.33 ± 0.39	0.17 ± 0.28
22b	American River, Middle Fork	Auburn	5-9	2.23 ± 2.91	1.58 ± 2.87	0.00 ± 0.33	0.23 ± 0.42
			9-14	0.0 ± 4.3	0.0 ± 4.2	0.93 ± 0.54	0.08 ± 0.46
22c	American River, South Fork	Lotus	5-9	4.40 ± 3.03	2.20 ± 2.96	0.15 ± 0.41	0.24 ± 0.34
			9-14	0.4 ± 4.4	0.0 ± 4.3	0.17 ± 0.48	0.76 ± 0.54
23	Mokelumne River	Woodbridge	5-3	2.65 ± 3.05	0.43 ± 2.96	0.08 ± 0.34	0.24 ± 0.47
			9-9	5.5 ± 4.3	3.8 ± 4.2	0.32 ± 0.37	0.16 ± 0.37
23a	Mokelumne River	Lancha Plana	5-2	1.93 ± 3.01	3.16 ± 3.05	0.15 ± 0.31	0.15 ± 0.40
			9-5	2.0 ± 4.2	1.5 ± 4.2	0.16 ± 0.32	0.40 ± 0.29
24	San Joaquin River	Friant	5-4	0.21 ± 2.86	0.43 ± 2.86	0.31 ± 0.31	0.38 ± 0.38
			9-6	0.0 ± 3.9	0.9 ± 3.9	0.18 ± 0.36	0.18 ± 0.47
25	San Joaquin River	Mendota	5-5	0.00 ± 2.78	0.00 ± 2.83	0.41 ± 0.45	0.25 ± 0.40
			9-8	0.0 ± 3.7	2.2 ± 3.8	0.00 ± 0.26	0.45 ± 0.49
25c	San Joaquin River	Fremont Ford Bridge	5-5	7.35 ± 3.48	0.21 ± 3.30	0.38 ± 0.45	0.30 ± 0.43
			9-7	3.1 ± 4.0	3.5 ± 4.1	0.41 ± 0.45	0.00 ± 0.27
25b	San Joaquin River	Hills Ferry Bridge	5-5	1.21 ± 3.05	1.12 ± 3.05	0.00 ± 0.38	0.49 ± 0.47
			9-8	4.7 ± 4.1	0.0 ± 3.9	0.00 ± 0.33	0.58 ± 0.49
26	San Joaquin River	Grayson	5-10	7.27 ± 3.46	2.68 ± 3.42	0.37 ± 0.48	0.30 ± 0.43
			9-27	6.2 ± 4.1	0.4 ± 4.0	0.51 ± 0.52	0.51 ± 0.48
26a	San Joaquin River	Maze Road Bridge	5-10	5.26 ± 3.70	0.00 ± 3.46	0.30 ± 0.37	0.00 ± 0.18
			9-27	1.5 ± 4.2	0.0 ± 4.1	0.34 ± 0.52	0.34 ± 0.48

TABLE B - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
27	San Joaquin River	Vernalis	5-5	8.69 ± 3.45	0.00 ± 3.34	0.32 ± 0.49	0.08 ± 0.43
			9-8	4.3 ± 4.4	0.0 ± 4.2	0.40 ± 0.43	0.72 ± 0.57
28	San Joaquin River	Antioch	5-2	6.52 ± 3.15	1.10 ± 3.02	0.08 ± 0.34	0.46 ± 0.48
			9-5	3.5 ± 4.2	0.0 ± 4.0	0.00 ± 0.26	0.40 ± 0.35
29	Stanislaus River	Mouth	5-5	3.78 ± 2.92	0.00 ± 2.83	0.39 ± 0.38	0.39 ± 0.38
			9-8	0.7 ± 3.8	0.0 ± 3.18	0.45 ± 0.44	0.27 ± 0.44
29a	Stanislaus River below Tulloch Dam		5-2	5.72 ± 4.83	0.00 ± 3.01	0.00 ± 0.27	0.25 ± 0.45
			9-6	1.6 ± 3.7	0.0 ± 3.6	0.00 ± 0.21	0.27 ± 0.33
30	Tuolumne River	Hickman-Waterford Bridge	5-10	9.39 ± 3.55	2.46 ± 3.34	0.08 ± 0.45	0.16 ± 0.38
			9-27	0.5 ± 3.6	0.1 ± 3.7	0.17 ± 0.39	0.08 ± 0.31
31	Tuolumne River	Tuolumne City	5-10	8.24 ± 3.70	3.17 ± 3.59	0.15 ± 0.35	0.00 ± 0.35
			9-27	5.0 ± 3.7	0.0 ± 3.5	0.17 ± 0.28	0.00 ± 0.31
31a	Tuolumne River below Don Pedro Dam		5-10	3.03 ± 3.78	0.75 ± 3.73	0.00 ± 0.40	0.08 ± 0.38
			9-27	3.6 ± 3.7	0.2 ± 3.6	0.33 ± 0.54	0.57 ± 0.52
32	Merced River	Stevinson	5-5	4.80 ± 3.76	0.00 ± 3.48	0.23 ± 0.38	0.39 ± 0.38
			9-8	4.0 ± 3.8	0.0 ± 3.6	0.49 ± 0.43	0.00 ± 0.45
32a	Merced River below Exchequer Dam		5-2	5.07 ± 3.11	4.34 ± 3.06	0.31 ± 0.31	0.15 ± 0.31
			9-6	5.4 ± 3.8	0.1 ± 3.7	0.08 ± 0.35	0.72 ± 0.47
33b	Kings River below Pine Flat Dam		5-3	5.58 ± 2.99	3.50 ± 2.91	0.23 ± 0.42	0.31 ± 0.44
			9-6	1.7 ± 3.7	2.0 ± 3.7	0.24 ± 0.35	0.00 ± 0.18
33c	Kings River below North Fork		5-2	0.35 ± 3.05	9.66 ± 3.30	0.31 ± 0.40	0.08 ± 0.38
			9-6	1.9 ± 3.7	0.6 ± 3.7	0.27 ± 0.49	0.81 ± 0.61

TABLE B - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
33d	Big Creek above Pine Flat Dam		11-1	1.5 ± 3.7	0.0 ± 3.6	0.27 ± 0.39	0.00 ± 0.36
34	Kings River below Peoples Weir		5-4	3.19 ± 3.28	0.75 ± 3.92	0.08 ± 0.30	0.25 ± 0.41
			9-7	2.0 ± 3.8	0.0 ± 3.6	0.41 ± 0.53	0.50 ± 0.58
35	Kaweah River	Three Rivers	5-5	2.32 ± 3.34	0.00 ± 3.20	0.16 ± 0.43	0.41 ± 0.45
			9-7	0.2 ± 3.8	0.0 ± 3.6	0.25 ± 0.41	0.08 ± 0.36
36	Kern River	Bakersfield	5-5	6.38 ± 3.53	0.00 ± 3.36	0.30 ± 0.40	0.08 ± 0.33
			9-7	6.4 ± 3.8	3.0 ± 3.7	0.72 ± 0.44	0.00 ± 0.37
36a	Kern River below Isabella Dam		5-2	0.43 ± 3.24	7.39 ± 3.43	0.61 ± 0.50	0.08 ± 0.42
			8-29	1.8 ± 4.1	2.5 ± 4.1	0.68 ± 0.65	0.68 ± 0.68
36b	Kern River	Kernville	5-2	0.27 ± 3.20	2.24 ± 3.25	0.39 ± 0.50	0.47 ± 0.55
			8-29	1.8 ± 3.8	1.8 ± 3.8	0.34 ± 0.44	0.59 ± 0.57
41	Clear Lake	Lakeport.	5-10	1.44 ± 3.29	4.91 ± 3.37	0.00 ± 0.32	0.08 ± 0.43
			9-14	4.7 ± 3.8	0.0 ± 3.6	0.08 ± 0.35	0.32 ± 0.32
42	Cache Creek	Lower Lake	5-10	4.38 ± 3.38	0.40 ± 3.24	0.23 ± 0.38	0.46 ± 0.47
			9-14	0.6 ± 3.7	0.0 ± 3.6	0.89 ± 0.51	0.00 ± 0.29
78	Bear River	Wheatland	5-9	2.16 ± 3.39	0.80 ± 3.36	0.23 ± 0.38	0.31 ± 0.31
			9-14	4.3 ± 3.5	0.0 ± 3.4	0.18 ± 0.42	0.18 ± 0.36
79	Cache Creek, North Fork	Lower Lake	5-10	3.71 ± 3.72	0.00 ± 3.60	0.08 ± 0.36	0.50 ± 0.51
			9-14	2.4 ± 3.2	1.8 ± 3.1	0.57 ± 0.45	0.33 ± 0.38
80	Cache Creek	Capay	5-10	5.19 ± 3.53	0.96 ± 3.39	0.00 ± 0.41	0.37 ± 0.45
			9-13	3.2 ± 3.3	1.1 ± 3.2	0.00 ± 0.19	0.33 ± 0.38

TABLE B - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
81	Putah Creek	Winters	5-11	3.18 ± 3.49	0.00 ± 3.37	0.00 ± 0.42	0.61 ± 0.47
			9-15	0.4 ± 3.7	0.9 ± 3.7	0.17 ± 0.51	0.41 ± 0.56
85a	Big Chico Creek	Chico	5-9	0.00 ± 3.51	0.00 ± 3.38	0.15 ± 0.31	0.38 ± 0.52
			9-12	1.4 ± 3.9	2.1 ± 4.0	0.25 ± 0.24	0.08 ± 0.36
87	Colusa Trough	Colusa	5-4	0.00 ± 3.51	0.00 ± 3.36	0.00 ± 0.29	0.31 ± 0.45
			9-13	1.8 ± 3.8	2.0 ± 3.8	0.16 ± 0.41	0.23 ± 0.43
87a	Sacramento River	Butte City	5-4	4.13 ± 3.35	0.64 ± 3.25	0.00 ± 0.22	0.00 ± 0.32
			9-13	4.3 ± 3.9	0.0 ± 3.8	0.23 ± 0.29	0.08 ± 0.34
88a	Cow Creek	Millville	5-11	0.00 ± 2.92	1.14 ± 2.99	0.07 ± 0.29	0.31 ± 0.31
			9-5	2.8 ± 4.0	0.0 ± 3.8	0.00 ± 0.30	0.18 ± 0.36
88b	Battle Creek	Cottonwood	5-11	2.59 ± 2.75	3.41 ± 2.75	0.15 ± 0.36	0.23 ± 0.38
			9-5	4.2 ± 4.0	0.0 ± 3.8	0.36 ± 0.55	0.09 ± 0.39
88c	Antelope Creek	Mouth	5-10	1.25 ± 2.58	0.21 ± 2.55	0.81 ± 0.44	0.57 ± 0.55
			9-13	6.2 ± 4.0	0.0 ± 3.8	0.08 ± 0.36	0.58 ± 0.45
88d	Red Bank Creek	Red Bluff	5-2	1.31 ± 2.55	1.52 ± 2.55	0.00 ± 0.33	0.32 ± 0.50
88e	Antelope Creek	Red Bluff	5-10	0.64 ± 3.53	0.00 ± 3.52	0.15 ± 0.40	0.30 ± 0.43
88g	Paynes Creek	Red Bluff	5-10	3.12 ± 3.63	0.00 ± 3.43	0.30 ± 0.40	0.38 ± 0.45
			9-12	2.8 ± 3.9	0.0 ± 3.8	0.00 ± 0.33	0.25 ± 0.36
91	Tule River	Porterville	5-5	0.80 ± 3.52	0.10 ± 3.50	0.31 ± 0.44	0.15 ± 0.51

TABLE B - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
92	Delta Mendota Canal	Mendota	5-5	0.45 ± 3.69	0.00 ± 3.67	0.00 ± 0.41	0.39 ± 0.50
			9-8	6.3 ± 3.9	0.0 ± 3.7	0.00 ± 0.37	0.68 ± 0.59
92a	Salt Slough	San Luis Ranch	5-4	3.17 ± 3.79	0.00 ± 3.56	0.23 ± 0.29	0.23 ± 0.29
			9-7	7.6 ± 3.8	7.2 ± 3.7	0.42 ± 0.42	0.59 ± 0.54
93	Delta Mendota Canal	Tracy	5-2	3.44 ± 3.53	0.00 ± 3.36	0.00 ± 0.38	0.54 ± 0.42
			9-5	7.8 ± 3.8	0.2 ± 3.6	0.24 ± 0.47	0.32 ± 0.49
94	Cosumnes River	Michigan Bar	5-2	6.06 ± 3.42	1.92 ± 3.30	0.00 ± 0.23	0.33 ± 0.51
			9-5	0.4 ± 3.6	0.0 ± 3.5	0.32 ± 0.37	0.00 ± 0.32
94a	Cosumnes River	McConnell	5-3	4.75 ± 3.52	0.21 ± 3.39	0.00 ± 0.27	0.25 ± 0.30
95a	Elder Creek	Gerber	5-10	0.56 ± 3.72	0.00 ± 3.64	0.15 ± 0.25	0.15 ± 0.30
95b	Thomes Creek	Mouth	5-10	3.15 ± 3.66	0.00 ± 3.56	0.15 ± 0.30	0.23 ± 0.33
99	Little Potato Slough	Terminous	5-2	1.84 ± 3.43	0.00 ± 3.38	0.15 ± 0.26	0.00 ± 0.29
			9-5	2.5 ± 3.5	0.0 ± 3.3	0.18 ± 0.47	0.36 ± 0.47
102	San Joaquin River	Mossdale Bridge	5-5	4.56 ± 3.66	0.00 ± 3.44	0.85 ± 0.46	0.16 ± 0.26
			9-8	9.6 ± 3.6	0.8 ± 3.4	0.45 ± 0.45	0.00 ± 0.33
103	Old River	Tracy	5-6	6.40 ± 3.76	0.00 ± 3.55	0.63 ± 0.48	0.00 ± 0.37
			9-8	6.7 ± 3.2	1.6 ± 4.6	0.66 ± 0.61	0.91 ± 0.68
104	Old River	Clifton Court Ferry	5-2	2.59 ± 3.72	0.00 ± 3.55	0.63 ± 0.41	0.16 ± 0.26
			9-5	3.6 ± 3.1	1.1 ± 3.1	0.00 ± 0.25	0.58 ± 0.49

TABLE B - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
106	Italian Slough	Mouth	5-2	2.29 ± 3.60	0.00 ± 3.48	0.08 ± 0.36	0.08 ± 0.36
			9-5	0.0 ± 3.2	1.5 ± 3.2	0.42 ± 0.56	0.58 ± 0.60
107	Indian Slough	Brentwood	5-3	0.13 ± 3.53	0.00 ± 3.44	0.00 ± 0.33	0.00 ± 0.33
			9-5	2.5 ± 3.2	0.0 ± 3.1	0.17 ± 0.34	0.75 ± 0.56
108	Old River	Orwood Bridge	5-3	2.14 ± 3.50	2.51 ± 3.53	0.53 ± 0.45	0.00 ± 0.37
			9-5	5.2 ± 3.3	1.2 ± 3.2	0.08 ± 0.39	0.48 ± 0.49
109	Rock Slough	Knightsen	5-2	3.44 ± 3.60	0.03 ± 3.51	0.15 ± 0.35	0.30 ± 0.40
			9-5	5.4 ± 3.4	0.0 ± 3.2	0.40 ± 0.39	0.08 ± 0.29
111a	Bear Creek	Merced	5-2	0.61 ± 3.53	0.88 ± 3.53	0.15 ± 0.31	0.23 ± 0.38
			9-6	0.4 ± 3.2	5.1 ± 3.3	0.18 ± 0.47	0.18 ± 0.29
113	Fresno River	Daulton	5-4	2.75 ± 3.60	0.00 ± 3.53	0.46 ± 0.36	0.08 ± 0.22
114	Chowchilla River	Buchanan Damsite	5-4	8.17 ± 3.97	2.72 ± 3.82	0.24 ± 0.39	0.08 ± 0.34

TABLE B - 10

RADIOASSAY OF SURFACE WATERS

LAHONTAN REGION (NO. 6)

Sta. No.	Stream	Near	Date 1960	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
17b	Susan River	Susanville	5-12	1.23 ± 3.60	0.00 ± 3.51	0.08 ± 0.39	0.31 ± 0.41
			9-9	5.8 ± 3.4	5.0 ± 3.4	0.18 ± 0.47	0.09 ± 0.44
37	Lake Tahoe	Tahoe Vista	5-11	0.00 ± 3.27	1.20 ± 3.28	0.08 ± 0.49	0.08 ± 0.45
			9-12	2.6 ± 4.2	0.0 ± 4.2	0.58 ± 0.46	0.34 ± 0.28
38	Lake Tahoe	Tahoe City	5-11	5.79 ± 3.19	3.15 ± 3.10	0.41 ± 0.45	0.33 ± 0.47
			9-12	0.0 ± 4.2	0.0 ± 4.2	0.17 ± 0.39	0.00 ± 0.28
39	Lake Tahoe	Bijou	5-11	4.30 ± 3.16	0.00 ± 3.07	0.61 ± 0.50	0.46 ± 0.47
			9-12	1.5 ± 4.3	2.1 ± 4.3	0.33 ± 0.43	0.17 ± 0.39
52	Truckee River	Truckee	5-11	0.99 ± 2.87	0.00 ± 2.80	0.32 ± 0.37	0.24 ± 0.34
			9-12	1.7 ± 4.1	2.8 ± 4.1	0.58 ± 0.50	0.42 ± 0.50
53	Truckee River	Farad	5-11	1.89 ± 3.20	0.00 ± 3.13	0.00 ± 0.41	0.24 ± 0.39
			9-12	5.3 ± 5.0	0.4 ± 4.1	0.32 ± 0.37	0.24 ± 0.39
115	Carson River, East Fork	Markleeville	5-12	0.00 ± 2.80	0.90 ± 2.85	0.00 ± 0.38	0.16 ± 0.38
			9-13	1.2 ± 3.9	2.4 ± 3.9	0.09 ± 0.44	0.18 ± 0.36
115a	Carson River, West Fork	Woodfords	5-12	0.73 ± 2.86	0.08 ± 2.85	0.08 ± 0.40	0.24 ± 0.49
			9-13	2.3 ± 4.0	5.3 ± 4.1	0.17 ± 0.51	0.25 ± 0.45
116	Walker River, West	Coleville	5-12	2.72 ± 2.91	0.00 ± 2.83	0.23 ± 0.48	0.45 ± 0.53
			9-13	0.0 ± 3.9	0.0 ± 3.9	0.00 ± 0.19	0.33 ± 0.47
116a	Walker River, East	Bridgeport	5-12	4.73 ± 3.00	0.44 ± 2.87	0.15 ± 0.35	0.15 ± 0.43
			9-13	0.0 ± 4.3	13.6 ± 4.7	0.08 ± 0.46	0.17 ± 0.55

A P P E N D I X C

BASIC DATA FOR 1961

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Note: Radioassays of snow at various locations in the State which appeared in earlier editions of this series will be found in "Radiological Health News," a quarterly publication of the California Department of Public Health.

TABLE

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

ANTELOPE CREEK NEAR TENNANT (STA. 1e)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/11 1235	16.5	36	11.3	82	58.0	7.1/7.5	—/0.48[c]		3.2/0.14		0.0/0.00	37/0.61	0.0/0.00	0.2/0.01			0.1			67[e]	23	24	0	4		
2/15 0900	51	33	11.7	81	47.0	7.1/7.5	—/0.38[c]		2.7/0.12		0.0/0.00	29/0.48		1.5/0.04			0.0			54[e]	24	19	0	1		
3/8 0820	24	35	11.8	84	57	7.3/7.8	—/0.52[c]		1.4/0.06		0.0/0.00	27/0.44		0.0/0.00			0.0			66[e]	10	26	4	5		
4/12 0815	44	38	11.8	88	48	7.3/7.7	—/0.40[c]		3.3/0.14		0.0/0.00	30/0.49		0.8/0.02			0.0			55[e]	26	20	0	1		
5/10 0710	88	36	11.0	80	38	7.3/7.3	3.8/0.19	1.6/0.13	1.7/0.07	0.8/0.02	0.0/0.00	23/0.38	0.8/0.02	0.4/0.01	0.0/0.00	0.1/0.01	0.0	19	Fe 0.02 d; PO_4 0.00; ABS 0.0	39[f]	17	16	0	3		
6/13 0820	99	41	10.4	81	38	7.3/7.5	—/0.32[c]		2.2/0.10		0.0/0.00	21/0.34		0.6/0.02			0.0			44[e]	24	16	0	4		
7/12 1130	27	52	10.6	96	52	7.3/7.7	—/0.41[c]		2.7/0.12		0.0/0.00	29/0.48		0.8/0.02			0.0			60[e]	23	21	0	1		
8/1 1010	18	48	9.9	85	58	7.3/7.9	—/0.42[c]		4.1/0.18		0.0/0.00	36/0.59		0.0/0.00			0.0			67[e]	30	21	0			
9/12 1515	11	55	8.9	84	61	7.3/7.8	7.2/0.36	1.3/0.11	2.8/0.12	1.4/0.04	0.0/0.00	36/0.59	0.0/0.00	1.0/0.03	0.2/0.00	0.1/0.01	0.0	30	Fe 0.06; Cu 0.01; PO_4 0.05; ABS 0.0 d	62[f]	19	24	0	5		
10/4 1135	11.5	47	9.6	81	62	7.3/7.7	—/0.50		2.5/0.11		0.0/0.00	38/0.62		0.0/0.00			0.0			71[e]	18	25	0	2		
11/13 1630	13	36	11.2	81	61	7.2/7.7	—/0.48[c]		2.6/0.11		0.0/0.00	37/0.61		0.0/0.00			0.0			70[e]	19	24	0	3		
12/4	Not Sampled																									

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

BIG RIVER NEAR MOUTH (STA. 8c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/9 1545	68 (est.)	47	11.1	94	185	7.3	—/1.52[c]		10/0.44		0.0/0.00	96/1.57		6.8/0.19			0.2			121[e]	22	76	0	1		
2/6 1330		48	9.1	79	146	7.1	—/1.12[c]		7.7/0.33		0.0/0.00	68/1.11		5.5/0.16			0.1			96[e]	23	56	0	10		
3/7 1605	190 (est.)	50	9.9	88	153	7.4	—/1.20[c]		8.5/0.37		0.0/0.00	75/1.23		5.5/0.16			0.1			100[e]	24	60	0	160		
4/3 1520	250 (est.)	60	9.8	99	146	7.3	—/1.19[c]		5.2/0.23		0.0/0.00	73/1.20		7.9/0.22			0.1			96[e]	16	59	0	4		
5/11 0930	200 (est.)	54	10.2	96	157	7.3	18/0.90	5.1/0.42	8.8/0.38	1.1/0.03	0.0/0.00	87/1.43	7.0/0.15	7.0/0.20	0.7/0.01	0.1/0.01	0.1	18	Al 0.01 Cu 0.01 PO_4 0.10 [d]	109[f]	22	66	0	6		
6/5 1540	180 (est.)	60	9.6	97	196	7.3	—/1.57[c]		10/0.44		0.0/0.00	101/1.66		7.3/0.21			0.3			128[e]	22	78	0	1		
7/3 1440	9 (est.)	71	8.9	101	210	7.6	—/1.60[c]		12/0.52		0.0/0.00	112/1.84		5.7/0.16			0.3			138[e]	25	80	0	4		
8/1 1545	20 (est.)	70	9.0	102	211	7.5	—/1.72[c]		12/0.52		0.0/0.00	113/1.85		7.8/0.22			0.4			138[e]	23	86	0	2		
9/5 1445	10 (est.)	68	8.5	94	215	7.4	22/1.10	7.3/0.60	13/0.57	1.4/0.04	0.0/0.00	116/1.90	7.0/0.15	8.0/0.23	0.0/0.00	0.1/0.01	0.4	19	Fe 0.10 PO_4 0.20 Zn 0.06 [d]	135[f]	25	83	0	1		
10/2 1555	12 (est.)	60	9.4	95	214	7.4	—/1.52[c]		13/0.57		0.0/0.00	115/1.88		7.5/0.21			0.3			140[e]	27	76	0	10		
11/9 1550	6 (est.)	50	11.1	99	227	7.3	—/1.80[c]		12/0.52		0.0/0.00	122/2.00		7.2/0.20			0.3			149[e]	22	90	0	3		
12/12 1100	21 (est.)	42	12.0	95	192	7.2	—/1.54[c]		11/0.48		0.0/0.00	95/1.56		7.8/0.22			0.2			126[e]	24	77	0	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

BUTTE CREEK NEAR MACDOEL (STA. 1d)

Date and time sampled P.S.T.	Discharge in cfs Est. by Sampler	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/11 1345		32	11.7	80	65.0	7.0/7.5	0.52[c]		3.5/0.15		0.0/0.00	42/0.69	0.0/0.00	0.2/0.01			0.1			63[e]	22	26	0	4		
2/15 1045	98	38	11.2	84	64.4	7.1/7.6	0.54[c]		4.6/0.20		0.0/0.00	41/0.67		1.0/0.03			0.2			62[e]	27	27	0	12		
3/8 0930	15	37	11.4	84	68	7.3/7.7	0.62[c]		1.4/0.06		0.0/0.00	42/0.69		0.0/0.00			0.0			66[e]	9	31	0	20		
4/12 0915	26	48	11.3	97	---	7.3	SAMPLE		BROKEN		IN	TRANSIT														
5/10 0845	25	48	9.4	81	74	7.3/7.4	7.1/0.35	2.9/0.24	3.6/0.16	1.3/0.03	0.0/0.00	46/0.75	0.0/0.00	0.0/0.00	0.2/0.00	0.2/0.01	0.0	28	Fe 0.03, Al 0.01, PO_4 0.05, ABS 0.0 [d]	66[f]	21	29	0	5		
6/13 0945	50	64	7.4	77	64	7.3/7.6	0.54[c]		3.7/0.16		0.0/0.00	38/0.62		0.0/0.00			0.0			62[e]	23	27	0	4		
7/12 1000	15	69	7.5	82	89	7.3/7.8	0.74[c]		4.5/0.20		0.0/0.00	53/0.87		1.2/0.03			0.1			86[e]	21	37	0	1		
8/1 1100	5	65	9.5	100	82	8.0/7.7	0.60[c]		5.5/0.24		0.0/0.00	50/0.82		0.0/0.00			0.0			79[e]	29	30	0			
9/12 1420	3	60	10.8	108	80	8.1/7.9	8.0/0.40	3.2/0.26	3.6/0.16	1.7/0.04	0.0/0.00	47/0.77	1.0/0.02	1.5/0.04	0.3/0.00	0.1/0.01	0.0	21	Fe 0.09, PO_4 0.05, ABS 0.0 [d]	63[f]	19	33	0	4		
10/4 1015	1	51	9.7	87	76	7.3/7.7	0.62[c]		3.2/0.14		0.0/0.00	47/0.77		0.1/0.00			0.0			74[e]	18	31	0	3		
11/13 1545	4	36	11.9	86	72	7.3/7.6	0.56[c]		3.6/0.16		0.0/0.00	43/0.70		0.2/0.01			0.0			70[e]	22	28	0	2		
12/4 1710	8	33	---	--	76	7.3/7.6	0.60[c]		3.5/0.15		0.0/0.00	44/0.72		0.2/0.01			0.0			74[e]	20	30	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

EEL RIVER NEAR DOS RIOS (STA. 5d)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/10 0742	91	44	11.4	93	191	7.5/7.9	—/1.68[c]		8.5/0.37		0.0/0.00	98/1.61	14/0.29	4.0/0.11			0.3			115[e]	18	84	4	4		USGS
2/7 0835	787	48	11.0	95	134	7.3/7.9	—/1.18[c]		4.0/0.17		0.0/0.00	69/1.13		2.5/0.07			0.2			80[e]	13	59	2	25		
3/7 0920	428	46	11.5	97	137	7.4/8.1	—/1.20[c]		4.2/0.18		0.0/0.00	72/1.18		0.8/0.02			0.1			82[e]	13	60	1	45		
4/4 0745	1,099	55	9.9	93	135	7.7/8.1	—/1.26		2.4/0.10		0.0/0.00	72/1.18		3.5/0.10			0.1			81[e]	7	63	4	10		
5/10 1800	343	56	9.9	94	163	7.7/8.0	18/0.90	6.8/0.56	5.4/0.23	0.8/0.02	0.0/0.00	85/1.39	10/0.21	2.8/0.08	0.0/0.00	0.1/0.01	0.2	14	Al 0.02 d PO_4 0.05 As 0.01 ABS 0.0	100[f]	13	73	3	60		
6/6 0955	90	64	8.9	93	207	8.1/8.2	—/1.85[c]		6.6/0.29		0.0/0.00	109/1.79		4.3/0.12			0.1			124[e]	14	92	3	1		
7/4 0700	16	71	7.6	85	249	8.1/8.2	—/2.28[c]		8.5/0.37		0.0/0.00	132/2.16		5.0/0.14			0.2			149[e]	14	114	6	1		
8/1 1205	9	80	9.2	114	227	8.3/8.4	—/1.88[c]		10/0.44		2/0.07	109/1.79		5.1/0.14			0.3		Tot. Alk. 113	136[e]	19	94	1			
9/4 1150	4.8	75	10.1	117	226	8.3/8.6	25/1.25	7.9/0.65	10/0.44	1.2/0.03	4/0.13	102/1.67	18/0.37	7.0/0.20	0.2/0.00	0.1/0.01	0.3	8.1	Fe 0.01 d Tot. Alk. 110 PO_4 0.05 ABS 0.0	132[f]	19	95	5	1		
10/2 1305	3.6	71	10.7	120	235	8.3/8.5	—/1.95[c]		10/0.44		5/0.17	104/1.70		6.6/0.19			0.4		Tot. Alk. 114	141[e]	18	98	5	4		
11/6 1325	6.9	54	10.7	99	262	8.1/8.3	—/2.28[c]		10/0.44		2/0.07	126/2.07		6.8/0.19			0.3		Tot. Alk. 130	157[e]	16	114	8	3		
12/4 1245	574	49	10.9	95	140	7.4/7.9	—/1.26[c]		4.4/0.19		0.0/0.00	68/1.11		3.2/0.09			0.2			84[e]	13	63	7	20		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

EEL RIVER NEAR MCCANN (STA. 5)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million													Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents			Total ppm	N.C. ppm			
	No gage		ppm	%Sat		a/b																				
1961																										
1/10 1210		45	8.6	71	200	7.5 / 7.9	1.80[c]		5.4 / 0.23		0.0 / 0.00	100 / 1.64	15 / 0.31	3.8 / 0.11			0.2			108[e]	11	90	8	8	Median 3.6	USGS
2/7 1245		50	10.5	93	147	7.3 / 8.0	1.32[c]		3.4 / 0.15		0.0 / 0.00	76 / 1.25		2.0 / 0.06			0.1			79[e]	10	66	4	92	Maximum 62.	
3/7 1400		48	11.6	100	152	7.3 / 7.9	1.38[c]		3.7 / 0.16		0.0 / 0.00	76 / 1.25		1.2 / 0.03			0.0			82[e]	10	69	7	60	Minimum 0.62	
4/4 1210		58	10.2	99	131	7.7 / 8.1	1.23[c]		1.6 / 0.07		0.0 / 0.00	68 / 1.11		2.4 / 0.07			0.0			70[e]	5	61	5	50		
5/10 1400		56	10.3	98	144	7.5 / 7.9	17 / 0.85	5.7 / 0.47	4.0 / 0.17	1.0 / 0.03	0.0 / 0.00	76 / 1.25	9.0 / 0.19	2.2 / 0.06	0.2 / 0.00	0.1 / 0.01	0.1	14	Al 0.05 As 0.01 d PO_4 0.10 ABS 0.0	90[f]	11	66	4	40		
6/6 1410		66	9.8	104	163	7.6 / 8.1	1.51[c]		3.7 / 0.16		0.0 / 0.00	84 / 1.38		3.4 / 0.10			0.0			88[e]	10	75	6	15		
7/4 1210		73	8.7	100	235	8.1 / 8.2	2.20[c]		6.4 / 0.28		0.0 / 0.00	123 / 2.02		4.5 / 0.13			0.2			126[e]	11	110	9	1		
8/1 1525		76	8.5	100	255	7.9 / 8.3	2.29[c]		7.2 / 0.31		4 / 0.13	125 / 2.05		5.4 / 0.15			0.0		Tot. Alk. 133	137[e]	12	114	5			
9/4 1600		73	8.4	97	266	7.7 / 8.3	34 / 1.70	8.6 / 0.71	7.9 / 0.34	1.3 / 0.03	2 / 0.07	128 / 2.10	22 / 0.46	7.0 / 0.20	0.0 / 0.00	0.0 / 0.00	0.3	12	Cu 0.01 Tot. Alk 132 PO_4 0.00 ABS 0.0 d	158[f]	12	120	12	1		
10/2 1635		65	9.0	95	280	7.7 / 8.2	2.57[c]		6.9 / 0.30		0.0 / 0.00	137 / 2.25		7.4 / 0.21			0.2			151[e]	10	129	17	4		
11/6 1705		58	9.1	88	295	8.1 / 8.4	2.66[c]		8.8 / 0.38		3 / 0.10	131 / 2.15		10 / 0.28			0.2		Tot. Alk. 137	159[e]	12	133	21	3		
12/4 1625		51	10.8	96	145	7.3 / 7.7	1.32[c]		3.6 / 0.16		0.0 / 0.00	68 / 1.11		2.8 / 0.08			0.3			78[e]	11	66	10	50		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

EL RIVER, MIDDLE FORK AT DOS RIOS (STA. 5c)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/10 0830	470	43	11.8	95	184	7.5/8.0	—/1.66[c]		4.9/0.21		0.0/0.00	94/1.54	14/0.29	3.8/0.11			0.2			109[e]	11	83	6	4		USGS
2/7 0915	2,510	46	11.8	99	138	7.5/8.0	—/1.28[c]		3.6/0.16		0.0/0.00	73/1.20		1.5/0.04			0.1			81[e]	11	64	4	55		
3/7 1030	2,180	44	11.7	95	162	7.5/8.1	—/1.47[c]		3.7/0.16		0.0/0.00	84/1.38		0.3/0.01			0.1			96[e]	10	74	5	30		
4/4 0820	5,150	51	10.8	96	103	7.7/8.1	—/1.01[c]		1.3/0.06		0.0/0.00	56/0.92		2.0/0.06			0.1			61[e]	6	50	4	45		
5/10 1730	2,290	52	11.0	100	128	7.5/8.0	15/0.75	5.5/0.45	3.2/0.14	0.9/0.02	0.0/0.00	67/1.10	7.0/0.15	2.0/0.06	0.0/0.00	0.1/0.01	0.0	14	Al 0.04 d; PO_4 0.05; As 0.03; ABS 0.0	81[f]	10	60	5	40		
6/6 0930	802	60	9.8	98	140	7.6/8.1	—/1.29[c]		1.3/0.06		0.0/0.00	71/1.16		2.3/0.06			0.0			83[e]	4	65	7	3		
7/4 0730	167	70	8.3	92	235	8.1/8.2	—/2.20[c]		5.9/0.26		0.0/0.00	116/1.90		5.8/0.16			0.1			139[e]	11	110	15	2		
8/1 1215	34	80	8.4	104	278	8.1/8.5	—/2.49[c]		10/0.44		5/0.17	119/1.95		10/0.28			0.1		Tot. Alk. 129	164[e]	15	125	19			
9/4 1205	18.6	75	9.6	112	282	8.1/8.4	32/1.60	9.4/0.77	11/0.48	1.1/0.03	4/0.13	103/1.69	30/0.62	16/0.45	0.0/0.00	0.1/0.01	0.2	7.9	Cu 0.01 d; PO_4 0.00; Tot. Alk. 111; ABS 0.0	163[f]	17	118	27	1		
10/2 1330	13.6	68	10.1	110	325	8.1/8.5	—/2.68[c]		13/0.57		6/0.20	129/2.11		22/0.62			0.2		Tot. Alk. 141	192[e]	18	134	18	4		
11/6 1400	30.5	54	11.0	102	348	8.1/8.4	—/2.92[c]		15/0.65		2/0.07	130/2.13		24/0.68			0.3		Tot. Alk. 134	205[e]	18	146	36	2		
12/4 1320	612	45	11.7	97	155	7.3/7.9	—/1.46[c]		3.5/0.15		0.0/0.00	76/1.25		2.8/0.08			0.1			91[e]	9	73	11	25		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

EEL RIVER AT SCOTIA (STA. 6)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/10 1338	1,790	50	9.3	82	190	7.5/8.0	—/1.76[c]		6.6/0.29		0.0/0.00	100/1.64		5.2/0.15			0.0			110[e]	14	88	6	4	Median 2.3	USGS
2/7 1415	10,700	52	9.9	90	147	7.3/8.0	—/1.30[c]		4.6/0.20		0.0/0.00	76/1.25		3.5/0.10			0.1			85[e]	13	65	3	92	Maximum 62.	
3/7 1545	10,200	52	9.7	88	165	7.5/7.9	—/1.42[c]		6.4/0.28		0.0/0.00	82/1.34		4.0/0.11			0.0			95[e]	16	71	4	200	Minimum 0.12	
4/4 1300	10,300	61	9.7	98	151	7.5/8.0	—/1.34[c]		2.7/0.12		0.0/0.00	76/1.25		4.4/0.12			0.0			87[e]	8	67	5	35		
5/10 1245	6,290	58	10.2	99	155	7.5/7.9	16/0.80	6.3/0.52	5.8/0.25	0.9/0.02	0.0/0.00	76/1.25	9.0/0.19	4.0/0.11	1.2/0.02	0.1/0.01	0.1	15	Al 0.06 d; PO_4 0.45; As 0.01; ABS 0.0	95[f]	16	66	4	30		
6/6 1500	2,590	68	9.6	104	185	7.7/8.1	—/1.67[c]		5.7/0.25		0.0/0.00	94/1.54		5.0/0.14			0.0			107[e]	13	84	7	3		
7/4 1320	706	69	9.9	109	244	8.1/8.1	—/2.22[c]		7.8/0.34		0.0/0.00	131/2.15		5.8/0.16			0.1			141[e]	13	111	4	2		
8/1 1730	230	76	10.1	119	274	8.1/8.5	—/2.49[c]		9.6/0.42		3/0.10	147/2.41		6.8/0.19			0.1		Tot. Alk. 153	158[e]	14	125	0			
9/4 1720	145	76	10.8	127	272	8.3/8.5	33/1.65	9.8/0.81	9.6/0.42	1.4/0.04	4/0.13	138/2.26	16/0.33	8.0/0.23	0.2/0.00	0.1/0.01	0.1	8.5	Fe 0.03 d; Mn 0.10; Tot. Alk. 146; PO_4 0.05; ABS 0.0	159[f]	14	123	3	1		
10/2 1745	92.4	63	11.8	128	294	7.9/8.4	—/2.72[c]		9.2/0.40		5/0.17	148/2.43		7.6/0.21			0.1		Tot. Alk. 158	170[e]	13	136	6	4		
11/6 1820	201	57	10.9	105	292	8.4/8.5	—/2.72[c]		8.8/0.38		4/0.13	142/2.33		8.5/0.24			0.2		Tot. Alk. 150	168[e]	12	136	13	3		
12/4 1750	6,590	52	10.5	95	145	7.4/7.7	—/1.30[c]		6.5/0.28		0.0/0.00	68/1.11		3.8/0.11			0.1			84[e]	18	65	9	20		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

EEL RIVER, SOUTH FORK NEAR MIRANDA (STA. 7)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/10 1100	950	46	11.2	94	153	7.4/7.5	1.34[c]		6.7/0.29		0.0/0.00	78/1.28		4.8/0.14			0.0			91[e]	18	67	3	4	Median 2.3	USGS
2/7 1145	2,990	50	10.5	93	125	7.1/8.0	1.04[c]		5.0/0.22		0.0/0.00	64/1.05		4.5/0.13			0.2			74[e]	17	52	0	38	Maximum 230.	
3/7 1230	2,420	49	10.4	90	120	7.3/7.8	1.03[c]		5.2/0.23		0.0/0.00	58/0.95		2.8/0.08			0.0			71[e]	18	51	3	120	Minimum 0.06	
4/4 1115	2,200	58	9.8	95	133	7.5/7.9	1.14[c]		3.0/0.13		0.0/0.00	68/1.11		4.6/0.13			0.1			79[e]	10	57	1	5		
5/10 1420	2,910	56	10.4	99	129	7.3/7.9	12/0.60	5.6/0.46	5.7/0.25	0.7/0.02	0.0/0.00	65/1.07	7.0/0.15	3.8/0.11	0.1/0.00	0.1/0.01	0.1	17	Al 0.10 d; PO_4 0.10 ABS 0.0	84[f]	19	53	0	90		
6/6 1300	850	63	9.7	100	165	7.6/8.2	1.44[c]		1.9/0.08		0.0/0.00	86/1.41		5.3/0.15			0.1			98[e]	5	72	1	1		
7/4 1105	500	71	8.7	98	197	8.1/8.2	1.68[c]		7.2/0.31		0.0/0.00	110/1.80		3.8/0.11			0.0			117[e]	16	84	0	5		
8/1 1430	96	78	10.1	122	218	8.1/8.4	1.98[c]		8.4/0.37		6/0.20	111/1.82		5.8/0.16			0.1		Tot. Alk. 123	130[e]	16	99	0	2		
9/4 1445	57.0	75	10.7	124	231	8.1/8.6	27/1.35	8.4/0.69	9.5/0.41	1.4/0.04	4/0.13	120/1.97	8.0/0.17	8.0/0.23	0.2/0.00	0.1/0.01	0.1	9.9	Fe 0.03 PO_4 0.05 d; Zn 0.01 ABS 0.0; As 0.02; Tot. Alk. 128	136[f]	16	102	0	3		
10/2 1550	27	67	10.2	110	255	8.1/8.2	2.36[c]		8.8/0.38		0.0/0.00	140/2.29		6.0/0.17			0.1			152[e]	14	118	3	4		
11/6 1615	70	57	10.8	104	235	7.9/8.4	2.08[c]		8.0/0.35		5/0.17	114/1.87		6.5/0.18			0.1		Tot. Alk. 124	140[e]	14	104	2	3		
12/4 1530	1,340	51	10.7	96	134	7.3/7.7	1.10[c]		5.2/0.23		0.0/0.00	62/1.02		5.2/0.15			0.1			80[e]	17	55	4	25		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

GUALALA RIVER, SOUTH FORK NEAR ANNAPOLIS (STA. 9a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1961																										USGS
1/9 1150	122	49	10.3	90	224	7.3	—/1.90[c]		9.6/0.42		0.0/0.00	115/1.88		6.8/0.19			0.0			134[e]	18	95	1	1	Median 6.2	
2/6 1015	520	48	10.0	86	176	7.3	—/1.44[c]		7.2/0.31		0.0/0.00	88/1.44		4.8/0.14			0.0			106[e]	18	72	0	15	Maximum 23.	
3/7 1230	314	51	10.6	95	181	7.3	—/1.52[c]		8.5/0.37		0.0/0.00	87/1.43		5.8/0.16			0.0			109[e]	20	76	5	30	Minimum 0.5	
4/3 1240	300	62	9.6	98	195	7.6	—/1.65[c]		5.8/0.25		0.0/0.00	98/1.61		8.0/0.23			0.0			117[e]	13	83	3	4		
5/11 1300	60 (est.)	62	7.3	75	222	7.2	24/1.20	10/0.84	11/0.48	1.3/0.03	0.0/0.00	127/2.08	13/0.27	7.5/0.21	1.0/0.02	0.1/0.01	0.1	17	Al 0.07 Cu 0.01[d] PO_4 0.05	148[f]	19	102	0	3		
6/5 1250	40 (est.)	62	8.6	88	252	7.3	—/2.14[c]		12/0.52		0.0/0.00	129/2.11		7.5/0.21			0.0			151[e]	20	107	1	1		
7/3 1040	15	69	8.2	90	272	7.7	—/2.20[c]		13/0.57		0.0/0.00	150/2.46		7.2/0.20			0.0			163[e]	21	110	0	4		
8/1 1240	6 (est.)	72	9.9	112	276	7.8	—/2.46[c]		13/0.57		0.0/0.00	149/2.44		10/0.28			0.1			166[e]	19	123	1	2		
9/5 1115	3.7	71	11.3	127	274	8.1	28/1.40	11/0.92	15/0.65	1.4/0.04	2/0.07	147/2.41	12/0.25	13/0.37	0.2/0.00	0.00/0.00	0.2	18	Fe 0.02 PO_4 0.05[d] Zn 0.01 Tot. Alk. 151	175[f]	22	116	0	6		
10/2 1235	3.5	68	10.6	116	277	8.0	—/2.36[c]		13/0.57		0.0/0.00	154/2.52		8.0/0.23			0.2			166[e]	19	118	0	5		
11/9 1215		57	11.2	108	290	8.0	—/2.44[c]		14/0.61		2/0.07	156/2.56		8.2/0.23			0.0		Tot. Alk. 160	174[e]	20	122	0	2		
12/11 1645	31	45	10.7	88	215	7.2	—/1.83[c]		9.6/0.42		0.0/0.00	109/1.79		7.5/0.21			0.1			129[e]	19	91	2	2		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

KLAMATH RIVER NEAR COPCO (STA. 1)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961 1/4 1430	2,210	38	10.0	75	185	7.6	1.08[c]		20 / 0.87		0.0 / 0.00	92 / 1.51	12 / 0.25	5.0 / 0.14			0.2			132[e]	45	54	0	5	Median 2.3	USGS
2/6 1245	2,400	41	10.4	81	244	7.5	1.44[c]		24 / 1.04		0.0 / 0.00	89 / 1.46	34 / 0.71	5.5 / 0.16			0.2			174[e]	42	72	0	10	Maximum 2,400.	
3/2 1100	3,160	43	8.6	69	308	7.2	2.00[c]		25 / 1.09		0.0 / 0.00	110 / 1.80	58 / 1.21	3.0 / 0.08			0.1			220[e]	35	100	10	20	Minimum 0.45 -	
4/10 1600	1,860		9.3		265	7.5	1.82[c]		19 / 0.83		0.0 / 0.00	98 / 1.61		1.2 / 0.03			0.1			189[e]	31	91	11	6		
5/8 1500	1,440	55	8.3	78	266	6.9	16 / 0.80	9.8 / 0.81	22 / 0.96	3.0 / 0.08	0.0 / 0.00	86 / 1.41	46 / 0.96	10 / 0.28	1.1 / 0.02	0.2 / 0.01	0.1	23	Fe 0.03 Zn 0.02 d; PO_4 0.15; Al 0.01 ABS 0.0	173[f]	36	80	9	1		
6/5 0900	1,490	64	7.3	76	180	7.1	1.22[c]		16 / 0.70		0.0 / 0.00	80 / 1.31		4.8 / 0.14			0.1			129[e]	36	61	0	4		
7/13 1030	1,380		6.8		189	7.5	1.14[c]		17 / 0.74		0.0 / 0.00	81 / 1.33		3.5 / 0.10			0.1			135[e]	39	57	0	5		
8/7 1440	1,380	72	6.6	75	158	7.4	1.06[c]		13 / 0.57		0.0 / 0.00	75 / 1.23		2.2 / 0.06			0.0			113[e]	35	53	0	5		
9/11 0830	2,270	64	7.5	78	178	7.5	14 / 0.70	5.1 / 0.42	15 / 0.65	2.9 / 0.07	0.0 / 0.00	83 / 1.36	12 / 0.25	4.8 / 0.14	2.3 / 0.04	0.1 / 0.01	0.1	38	Fe 0.07 d; Mn 0.12; PO_4 0.70 ABS 0.0	135[f]	35	56	0	9		
10/5 1315	2,240	58	5.9	57	169	7.6	1.04[c]		15 / 0.65		0.0 / 0.00	82 / 1.34		3.5 / 0.10			0.1			121[e]	38	52	0	8		
11/8 1130		46			188	7.1	1.04[c]		20 / 0.87		0.0 / 0.00	76 / 1.25		4.0 / 0.11			0.3			134[e]	46	52	0	9		
*12/5 1005	2,130	45	11.4	94	249	7.2 / 7.5	1.38[c]		25 / 1.09		0.0 / 0.00	96 / 1.57		6.8 / 0.19			0.1			178[e]	44	69	0	9		

*Sample taken below Iron Gate Dam

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

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TABLE C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

KLAMATH RIVER ABOVE HAMBURG RESERVOIR SITE (STA. 1c)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/12 0805		39	11.5	87	226	7.3 / 7.9	1.46[c]		19 / 0.83		0.0 / 0.00	112 / 1.84	15 / 0.31	6.5 / 0.18			0.2			156[e]	36	73	0	25		USGS
2/14 1500		46	11.2	94	283	7.7 / 7.9	2.00[c]		17 / 0.74		0.0 / 0.00	128 / 2.10	24 / 0.50	6.5 / 0.18			0.1			195[e]	27	100	0	25		
3/7 1435		45	11.4	94	295	7.7 / 8.0	2.07[c]		21 / 0.91		0.0 / 0.00	126 / 2.07	38 / 0.79	4.9 / 0.14			0.1			204[e]	31	103	0	40		
4/11 1505		55	10.3	97	253	7.8 / 7.7	1.86[c]		16 / 0.70		0.0 / 0.00	104 / 1.70	34 / 0.71	3.5 / 0.10			0.2			175[e]	27	93	8	19		
5/9 1420		58	10.5	102	266	8.2 / 8.0	18 / 0.90	11 / 0.91	19 / 0.83	2.6 / 0.07	0.0 / 0.00	104 / 1.70	37 / 0.77	10 / 0.28	1.5 / 0.02	0.1 / 0.01	0.1	24	Fe 0.03, PO_4 0.20, ABS 0.0 [d]	174[f]	31	91	6	3		
6/13 1500		69	9.4	103	216	8.1 / 8.0	1.76[c]		4.0 / 0.17		0.0 / 0.00	104 / 1.70		5.2 / 0.15			0.1			149[e]	9	88	3	4		
7/11 1840		80	8.2	101	212	8.3 / 8.2	1.43[c]		18 / 0.78		0.0 / 0.00	98 / 1.61		6.0 / 0.17			0.1			146[e]	35	72	0	4		
8/1 0730		71	7.4	83	176	8.0 / 8.0	1.09[c]		16 / 0.70		0.0 / 0.00	92 / 1.51		3.2 / 0.09			0.0			121[e]	39	55	0			
9/12 0850		65	8.6	91	188	7.7 / 7.8	5.2 / 0.26	11 / 0.90	16 / 0.70	3.2 / 0.08	0.0 / 0.00	90 / 1.48	10 / 0.21	5.2 / 0.15	1.5 / 0.02	0.2 / 0.01	0.2	38	Fe 0.12, Mn 0.08, PO_4 0.60, ABS 0.0 [d]	134[f]	36	58	0	6		
10/3 1300		60	9.7	97	193	7.5 / 7.8	1.28[c]		16 / 0.70		0.0 / 0.00	97 / 1.59		4.6 / 0.13			0.1			133[e]	35	64	0	7		
11/14 0915		44	10.6	86	226	7.6 / 7.7	1.39[c]		20 / 0.87		0.0 / 0.00	103 / 1.69		6.2 / 0.17			0.2			156[e]	38	69	0	10		
12/5 1225		47	9.9	84	287	7.6	1.74[c]		26 / 1.13		0.0 / 0.00	125 / 2.05		8.5 / 0.24			0.2			198[e]	39	87	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

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TABLE C - 1
ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

KLAMATH RIVER NEAR KLAMATH (STA. 3)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/11 1200	8,440	45	11.2	93	148	7.4 / 7.7	/ 1.28[c]		5.9 / 0.26		0.0 / 0.00	88 / 1.44	5.0 / 0.10	3.2 / 0.09			0.1			96[e]	17	64	0	4	Median 2.3	USGS
2/8 1320	18,100	49	10.0	87	142	7.3 / 8.0	/ 1.26[c]		5.2 / 0.23		0.0 / 0.00	79 / 1.29		3.0 / 0.08			0.0			92[e]	15	63	0	22	Maximum 620.	
3/8 1350	20,500	47	10.9	92	139	7.5 / 8.0	/ 1.06[c]		8.0 / 0.35		0.0 / 0.00	72 / 1.18		0.9 / 0.03			0.0			90[e]	25	53	0	30	Minimum 0.23	
4/5 1250	33,300	53	10.3	94	113	7.3 / 7.8	/ 1.05[c]		1.4 / 0.06		0.0 / 0.00	60 / 0.98		2.6 / 0.07			0.0			73[e]	5	52	3	25		
5/9 1205	18,300	54	10.4	96	120	7.3 / 7.8	12 / 0.60	6.3 / 0.52	3.7 / 0.16	0.7 / 0.02	0.0 / 0.00	60 / 0.98	6.4 / 0.13	7.3 / 0.21	0.0 / 0.00	0.1 / 0.01	0.1	14	Fe 0.02 d; PO_4 0.05; ABS 0.0	81[f]	12	56	7	5		
6/7 1200	16,100	60	10.2	102	106	7.3 / 7.9	/ 0.95[c]		1.7 / 0.07		0.0 / 0.00	57 / 0.93		3.2 / 0.09			0.0			69[e]	7	48	1	4		
7/5 1210	4,500	67	9.0	97	159	7.9 / 8.0	/ 1.38[c]		6.6 / 0.29		0.0 / 0.00	80 / 1.31		4.0 / 0.11			0.1			103[e]	17	69	3	1		
8/3 0745	2,660	71	7.9	89	164	7.0 / 8.0	/ 1.36[c]		7.4 / 0.32		0.0 / 0.00	90 / 1.48		2.8 / 0.08			0.0			106[e]	19	68	0			
9/6 0740	2,160	68	8.6	93	178	7.9 / 8.2	17 / 0.85	7.5 / 0.62	8.4 / 0.37	1.4 / 0.04	0.0 / 0.00	94 / 1.54	7.6 / 0.16	6.0 / 0.17	0.0 / 0.00	0.0 / 0.00	0.1	20	Cu 0.01 Fe 0.04 d; PO_4 0.10; ABS 0.0	114[f]	20	74	0	6		
10/3 1515	2,180	65	11.5	121	193	8.3 / 8.3	/ 1.52[c]		10 / 0.44		2 / 0.07	98 / 1.61		5.0 / 0.14			0.1		Tot. Alk. 102	125[e]	22	76	0	4		
11/7 1515	3,230	52	10.8	98	188	7.7 / 7.7	/ 1.40[c]		11 / 0.48		0.0 / 0.00	92 / 1.51		4.8 / 0.14			0.0			122[e]	26	70	0	5		
12/5 1505	7,460	48	11.4	98	156	7.3 / 7.8	/ 1.34[c]		5.3 / 0.23		0.0 / 0.00	84 / 1.38		3.2 / 0.09			0.1			101[e]	13	67	0	8		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

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TABLE 3-1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

KLAMATH RIVER NEAR SEIAD VALLEY (STA. 2b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/12 0845	3,140	38	12.2	91	216	7.3/7.8	1.46[c]		17/0.74		0.0/0.00	110/1.80	14/0.29	6.2/0.17			0.2			151[e]	34	73	0	60		USGS
2/14 1400	6,060	46	11.2	94	200	7.5/7.9	1.74[c]		9.6/0.42		0.0/0.00	104/1.70	13/0.27	4.5/0.13			0.1			140[e]	19	87	2	29		
3/7 1330	3,530	46	11.4	96	263	7.7/8.0	2.02[c]		15/0.65		0.0/0.00	119/1.95		3.9/0.11			0.1			184[e]	24	101	3	15		
4/11 1415	4,110	55	11.0	104	211	7.9/7.9	1.70[c]		11/0.48		0.0/0.00	96/1.57	23/0.48	3.0/0.08			0.1			148[e]	22	85	6	13		
5/9 1310	3,420	58	10.1	98	223	8.3/8.0	17/0.85	9.6/0.79	15/0.65	1.7/0.04	0.0/0.00	97/1.59	24/0.50	8.7/0.25	0.7/0.01	0.1/0.01	0.1	20	Fe 0.03 d; PO_4 0.15; ABS 0.0	145[f]	28	82	2	2		
6/13 1350	3,500	67	8.9	96	171	8.1/7.9	1.44[c]		9.6/0.42		0.0/0.00	89/1.46		3.9/0.11			0.0			120[e]	23	72	0	13		
7/11 1800	1,310	79	8.0	98	213	8.2/8.2	1.52[c]		16/0.70		0.0/0.00	102/1.67		5.0/0.14			0.1			149[e]	32	76	0	2		
8/1 0645	1,670	70	7.8	87	194	8.0/8.0	1.38[c]		13/0.57		0.0/0.00	102/1.67		5.5/0.16			0.0			136[e]	29	69	0			
9/12 0935	1,860	65	8.9	94	195	7.9/7.9	15/0.75	8.1/0.67	15/0.65	2.4/0.06	0.0/0.00	100/1.64	10/0.21	6.2/0.17	1.7/0.03	0.3/0.02	0.1	37	Fe 0.18 Cu 0.01; Mn 0.06 As 0.02; PO_4 0.45 ABS 0.0 d	145[f]	31	71	0	25		
10/3 1415	1,110	63	9.7	100	196	7.7/7.9	1.27[c]		16/0.70		0.0/0.00	100/1.64		4.9/0.14			0.1			137[e]	36	64	0	7		
11/14 0950	2,250	44	11.5	93	229	7.6/7.8	1.48[c]		19/0.83		0.0/0.00	108/1.77		6.4/0.18			0.2			160[e]	36	74	0	9		
12/5 1340	2,950	43	11.7	94	272	7.5/7.9	1.80[c]		23/1.00		0.0/0.00	122/2.00		8.2/0.23			0.2			190[e]	36	90	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 1
ANALYSES OF SURFACE WATER
NORTH COASTAL REGION (1)

KLAMATH RIVER AT SOMESBAR (STA. 2)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961 1/12 1115	4,380	44			182	7.6 / 7.8	/ 1.40[c]		11 / 0.48		0.0 / 0.00	97 / 1.59	8.0 / 0.17	4.8 / 0.14			0.1			123[e]	26	70	0	15	Median 2.3	USGS
2/	Not Sampled																								Maximum 230.	
3/9 1000	11,000	45	11.8	98	162	7.5 / 8.1	/ 1.31[c]		7.4 / 0.32		0.0 / 0.00	81 / 1.33		1.2 / 0.03			0.1			110[e]	20	65	0	15	Minimum 0.06	
4/6 1200	15,900	50	11.6	103	120	7.5 / 7.9	/ 1.08[c]		2.0 / 0.09		0.0 / 0.00	64 / 1.05		2.6 / 0.07			0.1			81[e]	8	54	2	9		
5/8 1645	8,700	54	11.0	102	139	7.9 / 7.9	12 / 0.60	6.8 / 0.56	5.3 / 0.23	1.1 / 0.03	0.0 / 0.00	60 / 0.98	9.6 / 0.20	7.0 / 0.20	0.2 / 0.00	0.1 / 0.01	0.1	18	Fe 0.02 d; PO_4 0.05; ABS 0.0	90[f]	16	58	9	1		
6/7 1800	9,910	58	10.9	106	106	7.7 / 8.0	/ 0.92[c]		1.6 / 0.07		0.0 / 0.00	56 / 0.92		3.0 / 0.08			0.0			72[e]	7	46	0	3		
7/6 1245	2,690	68	9.4	102	163	7.9 / 8.1	/ 1.32[c]		8.6 / 0.37		0.0 / 0.00	81 / 1.33		3.5 / 0.10			0.0			111[e]	22	66	0	4		
8/3 1345	1,780	76	8.4	99	165	7.9 / 7.9	/ 1.26[c]		10 / 0.44		0.0 / 0.00	91 / 1.49		3.1 / 0.09			0.1			112[e]	26	63	0			
9/6 1330	1,360	70	9.1	101	183	8.1 / 8.3	16 / 0.80	8.3 / 0.68	11 / 0.48	1.6 / 0.04	1 / 0.03	98 / 1.61	8.0 / 0.17	6.4 / 0.18	0.2 / 0.00	0.0 / 0.00	0.1	21	Tot.Alk. 100 d; Fe 0.06; PO_4 0.15; Cu 0.01; ABS 0.0	122[f]	24	74	0	5		
10/4 1345	1,680	65	9.6	101	213	7.9 / 8.2	/ 1.58[c]		14 / 0.61		0.0 / 0.00	115 / 1.88		6.8 / 0.19			0.2			144[e]	28	79	0	6		
11/8 1320	4,000	49	10.4	90	190	7.6 / 7.8	/ 1.28[c]		14 / 0.61		0.0 / 0.00	92 / 1.51		1.9 / 0.05			0.0			129[e]	32	64	0	9		
12/6 1400	5,060	45	12.2	101	196	7.6 / 7.8	/ 1.42		13 / 0.57		0.0 / 0.00	91 / 1.49		4.2 / 0.12			0.1			133[e]	29	71	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

MAD RIVER NEAR ARCATA (STA. 6a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																									Median 23. Maximum 2,400. Minimum 0.62	
1/11 1625	270	49	8.0	70	159	7.3/7.2	1.56[c]		4.6/0.20		0.0/0.00	76/1.25		3.5/0.10			0.0			98[e]	11	78	16	15		USGS
2/9 0715	985	52	10.4	95	114	7.1/7.8	1.00[c]		3.5/0.15		0.0/0.00	58/0.95		2.5/0.07			0.1			70[e]	13	50	2	61		
3/8 1800	1,700	48	9.3	80	98.1	7.2/7.7	0.85[c]		3.6/0.16		0.0/0.00	44/0.72		2.2/0.06			0.0			60[e]	16	43	7	160		
4/5 1015	1,130	54	10.4	96	97	7.3/7.7	0.88[c]		1.1/0.05		0.0/0.00	47/0.77		3.2/0.09			0.0			60[e]	5	44	5	30		
5/9 1420	1,350	54	10.5	97	97	7.1/7.6	11/0.55[c]	3.5/0.29	4.6/0.20	0.8/0.02	0.0/0.00	49/0.80	4.0/0.08	4.8/0.14	0.2/0.00	0.1/0.01	0.0	13	Al 0.11 ABS 0.0 PO4 0.05 Cu 0.01 d	66[f]	19	42	2	60		
6/7 1515	490	60	9.9	99	137	7.6/7.8	1.19[c]		1.7/0.07		0.0/0.00	66/1.08		3.8/0.11			0.0			84[e]	6	60	6	8		
7/6 0720	58.5	60	9.0	90	203	7.7/8.2	1.83[c]		4.6/0.20		0.0/0.00	111/1.82		3.1/0.09			0.0			125[e]	10	92	1	4		
8/2 1250	21	65	9.3	98	235	7.7/8.3	2.20[c]		5.8/0.25		2/0.07	124/2.03		5.0/0.14			0.0		Tot. Alk. 128	145[e]	10	110	5	2		
9/5 1330	31.0	68	9.5	103	246	7.7/8.2	36/1.80	6.3/0.52	5.9/0.26	1.2/0.03	0.0/0.00	134/2.20	11/0.23	6.5/0.18	0.4/0.01	0.1/0.00	0.0	10	Fe 0.10 d Cu 0.01 PO4 0.05 ABS 0.0	143[f]	10	116	6	15		
10/4 1015	26	60	9.1	91	258	7.7/8.1	2.48[c]		8.6/0.37		0.0/0.00	140/2.29		5.2/0.15			0.1			159[e]	13	124	9	4		
11/8 0945	60	58	9.8	95	253	7.3/8.2	2.36[c]		5.4/0.23		0.0/0.00	134/2.20		5.0/0.14			0.0			156[e]	9	118	8	5		
12/6 1015	1,300	48	11.0	95	123	7.3/7.9	1.10[c]		2.7/0.12		0.0/0.00	60/0.98		3.8/0.11			0.0			76[e]	10	55	6	40		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

MATTOLE RIVER NEAR PETROLIA (STA. 7a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 5.	USGS
1/11 0835	420	48	9.6	83	154	7.3 / 7.7	1.34[c]		6.5 / 0.28		0.0 / 0.00	70 / 1.15		3.5 / 0.10			0.1			92[e]	17	67	10	12	Maximum 230.	
2/8 0850	1,640	50	8.5	75	125	7.1 / 7.9	1.06[c]		5.3 / 0.23		0.0 / 0.00	54 / 0.89		3.0 / 0.08			0.0			75[e]	18	53	9	40	Minimum 0.23	
3/8 1005	1,130	50	9.3	82	131	7.3 / 7.8	1.10[c]		5.6 / 0.24		0.0 / 0.00	58 / 0.95		2.8 / 0.08			0.0			79[e]	18	55	7	200		
4/5 0745	1,104	55	10.1	95	136	7.3 / 7.8	1.13[c]		3.4 / 0.15		0.0 / 0.00	63 / 1.03		4.8 / 0.14			0.1			82[e]	12	56	4	15		
5/10 0850	2,270	52	10.4	95	118	7.3 / 7.7	13 / 0.65	3.8 / 0.31	6.0 / 0.26	1.2 / 0.03	0.0 / 0.00	54 / 0.89	9.0 / 0.19	5.5 / 0.16	0.1 / 0.00	0.1 / 0.01	0.0	15	Al 0.09 d; PO_4 0.05; ABS 0.0	81[f]	21	48	4	100		
6/6 1800	315	65	9.7	102	168	7.3 / 8.1	1.39[c]		3.4 / 0.15		0.0 / 0.00	79 / 1.29		4.2 / 0.12			0.1			101[e]	10	70	5	1		
7/5 0725	131	64	9.0	94	206	7.8 / 8.0	1.77[c]		7.2 / 0.31		0.0 / 0.00	103 / 1.69		4.5 / 0.13			0.0			124[e]	15	89	5	4		
8/2 1015	79	71	9.6	108	234	7.9 / 8.2	2.06[c]		8.4 / 0.37		0.0 / 0.00	119 / 1.95		4.0 / 0.11			0.1			140[e]	15	103	5	2		
9/5 1050	67.2	71	10.5	118	252	7.9 / 8.3	36 / 1.80	5.4 / 0.44	8.4 / 0.37	1.3 / 0.03	2 / 0.07	123 / 2.02	21 / 0.44	5.0 / 0.14	0.2 / 0.00	0.1 / 0.00	0.1	13	Fe 0.03 Tot.Alk.127; Zn 0.04 ABS 0.0 d; PO_4 0.05	152[f]	14	112	8	2		
10/3 1110	57.6	65	10.3	115	256	7.9 / 8.2	2.32[c]		9.1 / 0.40		0.0 / 0.00	124 / 2.03		3.8 / 0.11			0.1			154[e]	15	116	14	3		
11/7 1105	51	53	12.0	110	261	7.7 / 8.3	2.30[c]		7.9 / 0.34		4 / 0.13	111 / 1.82		4.0 / 0.11			0.0		Tot. Alk. 119	157[e]	13	115	17	3		
12/5 1050	986	50	10.8	96	149	7.3 / 7.7	1.20[c]		5.3 / 0.23		0.0 / 0.00	61 / 1.00		5.0 / 0.14			0.0			89[e]	15	60	10	50		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

NAVARRO RIVER NEAR NAVARRO (STA. 8b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/9 1437	118	50	11.0	97	235	7.5	2.00[c]		11/0.48		0.0/0.00	120/1.97		7.5/0.21			0.1			143[e]	19	100	2	2	Median 2.3	
2/6 1215	615	49	10.3	90	178	7.1	1.42[c]		7.7/0.33		0.0/0.00	86/1.41		6.2/0.17			0.1			108[e]	19	71	0	35	Maximum 2,400.	
3/7 1500	358	53	10.7	98	198	7.3	1.64[c]		9.3/0.40		0.0/0.00	96/1.57		6.0/0.17			0.1			121[e]	20	82	3	140	Minimum 0.13	
4/3 1920	430	64	9.5	99	194	7.4	1.57[c]		6.8/0.30		0.0/0.00	96/1.57		8.5/0.24			0.0			118[e]	16	78	0	8		
5/11 1030	200	58	10.1	98	201	7.4	24/1.20	7.3/0.60	11/0.48	1.2/0.03	0.0/0.00	114/1.87	11/0.23	7.8/0.22	0.5/0.01	0.1/0.01	0.1	17	Al 0.08 Cu 0.01[d] PO_4 0.20	136[f]	21	90	0	8		
6/5 1430	80	60	9.8	98	255	7.4	2.10[c]		2.0/0.09		0.0/0.00	134/2.20		9.0/0.25			0.2			156[e]	4	105	0	2		
7/3 1320	27	73	9.7	111	261	7.6	2.10[c]		13/0.57		0.0/0.00	145/2.38		7.4/0.21			0.1			159[e]	21	105	0	6		
8/1 1430	12	72	11.3	128	258	7.8	2.32[c]		13/0.57		0.0/0.00	140/2.29		8.7/0.25			0.3			157[e]	20	116	1	2		
9/5 1320	8.5	73	11.5	132	263	7.8	26/1.30	11/0.88	14/0.61	1.4/0.04	0.0/0.00	143/2.34	8.0/0.17	10/0.28	0.5/0.01	0.0/0.00	0.2	18	Fe 0.13 PO_4 0.10[d] Zn 0.03	159[f]	22	109	0	2		
10/2 1445	6.5	67	8.0	86	261	7.9	2.36[c]		13/0.57		0.0/0.00	144/2.36		8.5/0.24			0.3			159[e]	19	118	0	10		
11/9 1435	14	54	11.6	108	272	7.4	2.28[c]		13/0.57		0.0/0.00	150/2.46		7.8/0.22			0.1			166[e]	20	114	0	3		
12/12 0920	125	44	10.0	81	233	7.2	1.94[c]		11/0.48		0.0/0.00	118/1.93		9.5/0.27			0.2			142[e]	20	97	0	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

NOYO RIVER NEAR FORT BRAGG (STA. 10c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/9 1703	63	48	10.8	93	145	7.2	1.30[c]		9.0 / 0.39		0.0 / 0.00	88 / 1.44		6.8 / 0.19			0.0			100[e]	23	65	0	1	Median 2.3	
2/6 1440	370	48	10.2	88	116	7.1	0.86[c]		6.6 / 0.29		0.0 / 0.00	50 / 0.82		5.5 / 0.16			0.0			80[e]	25	43	2	10	Maximum 230.	
3/7 1710	285	50	10.1	89	116	7.2	0.86[c]		8.1 / 0.35		0.0 / 0.00	54 / 0.89		6.0 / 0.17			0.0			80[e]	29	43	0	60	Minimum 0.23	
4/3 1620	202	59	9.9	98	114	7.3	0.85[c]		4.4 / 0.19		0.0 / 0.00	53 / 0.87		7.8 / 0.22			0.0			78[e]	18	42	0	3		
5/11 0830	192	52	10.6	96	120	7.3	13 / 0.65	3.3 / 0.27	7.5 / 0.33	0.9 / 0.02	0.0 / 0.00	59 / 0.97	5.0 / 0.10	7.8 / 0.22	0.6 / 0.01	0.1 / 0.01	0.1	18	Fe 0.04 Al 0.08 [d] PO_4 0.15	85[f]	26	46	0	13		
6/5 1440	59	58	10.2	99	148	7.3	1.10[c]		9.3 / 0.40		0.0 / 0.00	72 / 1.18		6.5 / 0.18			0.0			102[e]	27	55	0	1		
7/3 1530	20	69	9.2	101	157	7.4	1.18[c]		9.9 / 0.43		0.0 / 0.00	77 / 1.26		7.3 / 0.21			0.0			108[e]	27	59	0	4		
8/2 0700	9.6	63	8.2	84	163	7.3	1.28		10 / 0.44		0.0 / 0.00	78 / 1.28		9.2 / 0.26			0.2			112[e]	26	64	0	2		
9/5 1615	4.2	68	8.7	95	169	7.4	16 / 0.80	4.9 / 0.40	11 / 0.48	1.2 / 0.03	0.0 / 0.00	80 / 1.31	3.4 / 0.07	12 / 0.34	0.3 / 0.00	0.1 / 0.01	0.2	18	Fe 0.22 Zn 0.04 [d] PO_4 0.05	106[f]	28	60	0	2		
10/2 1710	3.2	60	8.9	89	167	7.2	1.18[c]		11 / 0.48		0.0 / 0.00	80 / 1.31		10 / 0.28			0.1			115[e]	29	59	0	5		
11/10 0830	6.2	51	9.6	85	171	7.2	1.22[c]		11 / 0.48		0.0 / 0.00	86 / 1.41		9.5 / 0.27			0.0			117[e]	28	61	0	6		
12/12 1300	33	43	11.0	88	158	7.1	1.18[c]		9.5 / 0.41		0.0 / 0.00	73 / 1.20		8.3 / 0.23			0.1			109[g]	26	59	0	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 1
ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

OUTLET CREEK NEAR LONGVALE (STA. 5b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/10 0905	129	46	11.1	93	158	7.3 / 7.8	1.32[c]		7.1 / 0.31		0.0 / 0.00	76 / 1.25	7.0 / 0.15	7.2 / 0.20			0.5			95[e]	19	66	4	4		USGS
2/7 0800	413	49	11.0	96	115	7.3 / 7.8	0.98[c]		4.7 / 0.20		0.0 / 0.00	58 / 0.95		4.0 / 0.11			0.3			69[e]	17	49	1	14		
3/7 0850	882	47	11.2	95	88	7.3 / 7.7	0.73[c]		3.7 / 0.16		0.0 / 0.00	42 / 0.69		2.4 / 0.07			0.1			53[e]	18	36	2	30		
4/4 0725	251	58	9.4	91	127	7.5 / 8.0	1.12[c]		3.1 / 0.13		0.0 / 0.00	67 / 1.10		5.2 / 0.15			0.2			76[e]	10	56	1	3		
5/10 1815	567	56	9.8	93	108	7.3 / 7.5	9.6 / 0.48	5.1 / 0.42	4.4 / 0.19	0.5 / 0.01	0.0 / 0.00	55 / 0.90	6.0 / 0.12	3.5 / 0.10	0.4 / 0.01	0.1 / 0.01	0.2	13	Al 0.12 d; PO_4 0.05; ABS 0.0	70[f]	17	45	0	20		
6/6 1030	52	64	9.0	94	181	7.8 / 8.1	1.51[c]		7.5 / 0.33		0.0 / 0.00	92 / 1.51		6.5 / 0.18			0.2			109[e]	18	76	1	1		
7/4 0615	10	70	7.1	79	239	8.1 / 8.1	2.06[c]		10 / 0.44		0.0 / 0.00	127 / 2.08		8.8 / 0.25			0.7			143[e]	18	103	0	1		
8/1 1125	2.7	80	7.8	96	318	7.9 / 8.4	2.62[c]		17 / 0.74		3 / 0.10	159 / 2.61		22 / 0.62			2.3		Tot. Alk. 165	191[e]	22	131	0			
9/4 1055	1.6	74	8.2	95	396	7.9 / 8.4	35 / 1.75	16 / 1.29	24 / 1.04	1.8 / 0.05	4 / 0.13	170 / 2.79	7.0 / 0.15	38 / 1.07	0.0 / 0.00	0.1 / 0.01	4.2	14	Fe 0.01 d; Cu 0.01; Tot. Alk. 178; PO_4 0.00; ABS 0.0	228[f]	25	152	6	1		
10/2 1250	1.8	70	8.8	98	382	8.1 / 8.3	2.63[c]		25 / 1.09		2 / 0.07	165 / 2.70		36 / 1.02			4.0		Tot. Alk. 169	229[e]	29	132	0	4		
11/6 1305	2.6	54	10.1	94	346	7.9 / 8.4	2.80[c]		18 / 0.78		5 / 0.17	158 / 2.59		24 / 0.68			2.5		Tot. Alk. 168	208[e]	22	140	2	3		
12/4 1220	254	49	10.9	95	122	7.2 / 7.7	1.00[c]		5.0 / 0.22		0.0 / 0.00	57 / 0.93		5.0 / 0.14			0.3			73[e]	18	50	3	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

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TABLE C - 1
ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

REDWOOD CREEK AT ORICK (STA. 3b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/11 1105	400	43	10.3	83	101	7.2/7.4	—/0.86[c]		3.9/0.17		0.0/0.00	45/0.74	7.0/0.15	4.5/0.13			0.1			60	17	43	6	20	Median 6.2	USGS
2/8 1220	1,390	50	9.9	88	84.4	7.1/7.7	—/0.70[c]		3.1/0.13		0.0/0.00	39/0.64		4.8/0.14			0.0			50[e]	16	35	3	36	Maximum 620.	
3/8 1245	2,460	48	10.1	87	75	7.2/7.6	—/0.59[c]		4.1/0.18		0.0/0.00	34/0.56		3.0/0.08			0.0			45[e]	23	29	1	70	Minimum 0.5	
4/5 1145	1,560	55	10.3	97	72	7.2/7.6	—/0.60[c]		1.1/0.05		0.0/0.00	31/0.51		4.6/0.13			0.0			43[e]	8	30	5	35		
5/9 1315	2,200	52	10.6	96	72	7.1/7.5	9.2/0.46	1.6/0.13	2.5/0.11	0.6/0.02	0.0/0.00	33/0.54	4.4/0.09	2.8/0.08	0.0/0.00	0.2/0.01	0.1	7.3	Fe 0.14 d; Al 0.01; PO_4 0.05; ABS 0.0	45[f]	15	30	3	40		
6/7 1315	540	62	9.9	101	96	7.2/7.7	—/0.80[c]		1.4/0.06		0.0/0.00	41/0.67		5.2/0.15			0.0			57[e]	7	40	6	3		
7/5 1030	105	62	9.2	94	121	7.3/7.7	—/1.02[c]		4.2/0.18		0.0/0.00	56/0.92		5.0/0.14			0.0			72[e]	15	51	5	1		
8/2 1355	43	65	9.1	96	135	7.2/7.9	—/1.18[c]		5.1/0.22		0.0/0.00	64/1.05		4.6/0.13			0.0			80[e]	16	59	7			
9/5 1440	17.2	69	8.7	96	142	7.3/7.8	20/1.00	2.6/0.21	4.9/0.21	0.9/0.02	0.0/0.00	66/1.08	6.0/0.12	6.8/0.19	0.1/0.00	0.0/0.00	0.2	8.1	Fe 0.17 d; Cu 0.01; PO_4 0.05; ABS 0.0	83[f]	15	61	7	2		
10/3 1430	18	63	9.6	99	141	7.2/7.7	—/1.16[c]		4.1/0.18		0.0/0.00	65/1.07		6.4/0.18			0.0			84[e]	13	58	5	4		
11/7 1415	89	58	9.9	96	148	7.2/8.0	—/1.28[c]		4.3/0.19		0.0/0.00	60/0.98		6.1/0.17			0.1			88[e]	13	64	15	3		
12/5 1410	988	51	10.7	96	91	7.1/7.6	—/0.74[c]		2.7/0.12		0.0/0.00	37/0.61		3.5/0.10			0.0			54[e]	14	37	7	20		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

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ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

RUSSIAN RIVER AT GUERNEVILLE (STA. 10)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/4 1630	792	46	11.2	94	266	7.4	2.46[c]		9.3 / 0.40		0.0 / 0.00	143 / 2.34		6.0 / 0.17			0.3			158[e]	14	123	66	4	Median 13.	
2/17 1205	5,380	52	10.3	93	193	7.3	1.62[c]		6.5 / 0.28		0.0 / 0.00	96 / 1.57		4.0 / 0.11			0.1			115[e]	15	81	2	40	Maximum 7,000.	
3/1 1315	1,530	57	9.8	94	280	7.3	2.54[c]		13 / 0.57		0.0 / 0.00	146 / 2.39		5.5 / 0.16			0.3			166[e]	18	127	7	20	Minimum 0.62	
4/13 0830	1,450	60	9.5	95	258	7.7	2.40[c]		9.3 / 0.40		0.0 / 0.00	139 / 2.28		6.0 / 0.17			0.3			154[e]	14	120	6	13		
5/4 0800	770	60	10.6	106	253	7.9	24 / 1.20	13 / 1.04	13 / 0.57	2.5 / 0.06	0.0 / 0.00	139 / 2.28	14 / 0.29	5.8 / 0.16	1.1 / 0.02	0.1 / 0.01	0.3	13	Fe 0.02 Al 0.03 PO_4 0.10 [d]	155[f]	20	112	0	6		
6/1 1110	449	67	8.2	88	264	7.8	2.38[c]		9.3 / 0.40		0.0 / 0.00	144 / 2.36		6.5 / 0.18			0.3			157[e]	14	119	1	4		
7/7 1300	289	76	8.6	102	242	8.0	2.23[c]		7.7 / 0.33		0.0 / 0.00	136 / 2.23		3.1 / 0.09			0.3			144[e]	13	112	0	13		
8/1 0920	286	73	8.2	94	236	7.9	2.30[c]		7.5 / 0.33		0.0 / 0.00	133 / 2.18		4.0 / 0.11			0.3			140e	13	115	6	2		
9/5 0815	381	72	8.6	98	226	8.1	23 / 1.15	11 / 0.93	7.9 / 0.34	1.1 / 0.03	0.0 / 0.00	128 / 2.10	8.0 / 0.17	2.5 / 0.07	0.7 / 0.01	0.1 / 0.01	0.4	14	Fe 0.08 PO_4 0.05 Zn 0.03 [d]	132[f]	14	104	0	5		
10/2 0955	349	69	9.7	107	233	7.5	2.16[c]		8.1 / 0.35		0.0 / 0.00	130 / 2.13		5.8 / 0.16			0.3			139[e]	14	108	1	5		
11/9 0850	213	54	10.4	97	250	8.0	2.24[c]		9.3 / 0.40		0.0 / 0.00	141 / 2.31		5.2 / 0.15			0.3			149[e]	15	112	0	3		
12/11 1445	640	50	9.2	81	281	7.3	2.49[c]		10 / 0.44		0.0 / 0.00	140 / 2.29		8.0 / 0.23			0.4			167[e]	15	125	10	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

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TABLE C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

RUSSIAN RIVER NEAR HEALDSBURG (STA. 9)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/4 1525	722	47	11.9	101	247	7.9	2.32[c]		8.0 / 0.35		0.0 / 0.00	135 / 2.21		5.0 / 0.14			0.4			146[e]	13	116	5	4	Median 6.2	
2/17 1120	3,260	51	10.6	95	193	7.5	1.76[c]		5.6 / 0.24		0.0 / 0.00	102 / 1.67		3.0 / 0.08			0.2			114[e]	12	88	4	500	Maximum 2,400.	
3/1 1200	685	58	10.0	97	280	7.5	2.64[c]		8.5 / 0.37		0.0 / 0.00	148 / 2.43		4.2 / 0.12			0.3			165[e]	12	132	11	30	Minimum 0.23	
4/13 0800	896	56	9.8	93	246	7.9	2.38[c]		8.3 / 0.36		0.0 / 0.00	135 / 2.21		4.5 / 0.13			0.3			145[e]	13	119	8	13		
5/3 1520	752	64	10.5	109	237	7.9	23 / 1.15	12 / 1.00	9.5 / 0.41	1.4 / 0.04	1 / 0.03	130 / 2.13	11 / 0.23	3.8 / 0.11	0.8 / 0.01	0.2 / 0.01	0.3	13	Fe 0.02 Al 0.03 [d] Cu 0.01 Zn 0.01 Tot. Alk. 132	140[f]	16	108	0	4		
6/1 1220	415	65	8.0	84	247	7.7	2.28[c]		8.5 / 0.37		1 / 0.03	134 / 2.20		5.5 / 0.16			0.3		Tot. Alk. 136	146[e]	14	114	2	2		
7/7 1415	325 (est.)	75	8.0	94	229	8.0	2.10[c]		7.5 / 0.33		0.0 / 0.00	128 / 2.10		3.3 / 0.09			0.2			139[g]	14	105	0	5		
8/2 1240	300	75	8.3	97	220	8.1	2.08[c]		6.9 / 0.30		0.0 / 0.00	125 / 2.05		4.6 / 0.13			0.4			130[e]	13	104	2	2		
9/6 1330	390	73	7.7	89	215	7.9	24 / 1.20	9.2 / 0.76	7.0 / 0.30	1.0 / 0.03	0.0 / 0.00	120 / 1.97	7.0 / 0.15	2.2 / 0.06	0.8 / 0.01	0.1 / 0.01	0.4	12	Fe 0.10 PO_4 0.05 [d] Zn 0.02	123[f]	13	98	0	6		
10/3 1305	352	71	8.6	97	212	8.1	1.96[c]		6.4 / 0.28		0.0 / 0.00	119 / 1.95		4.0 / 0.11			0.3			125[e]	12	98	0	5		
11/10 1340	217	57	9.8	94	235	7.9	2.10[c]		7.9 / 0.34		2 / 0.07	129 / 2.11		3.5 / 0.10			0.3		Tot. Alk. 133	139[e]	14	105	0	5		
12/11 1330	481	51	10.0	89	277	7.4	2.58[c]		8.1 / 0.35		0.0 / 0.00	144 / 2.36		6.8 / 0.19			0.5			163[e]	12	129	11	9		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 / 0.00 except as shown.

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TABLE - C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

RUSSIAN RIVER NEAR HOPLAND (STA. 8a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/4 1425	410	48	10.8	94	175	7.3	—/1.48[c]		6.6/0.29		0.0/0.00	92/1.51		4.5/0.13			0.3			103[e]	16	74	0	15	Median 50.	
2/17 1000	1,570	48	11.5	100	157	7.3	—/1.38[c]		5.9/0.26		0.0/0.00	76/1.25		3.8/0.11			0.2			93[e]	16	69	7	40	Maximum 2,400.	
3/13 1305	1,260	53	10.2	95	163	7.3	—/1.38[c]		5.9/0.26		0.0/0.00	84/1.38		2.7/0.08			0.3			96[e]	16	69	0	35	Minimum 0.23	
4/12 1510	850	58	9.4	93	190	7.3	—/1.64[c]		9.2/0.40		0.0/0.00	98/1.61		5.5/0.16			0.2			112[e]	20	82	2	8		
5/3 1400	525	60	10.3	105	175	7.3	18/0.90	7.8/0.64	7.7/0.33	1.4/0.04	0.0/0.00	94/1.54	8.6/0.18	3.9/0.11	0.6/0.01	0.2/0.01	0.3	12	Fe 0.08 Al 0.07[d] PO_4 0.05	107[f]	17	77	0	3		
6/1 1400	225	65	9.9	106	197	7.7	—/1.71[c]		7.4/0.32		0.0/0.00	101/1.66		4.8/0.14			0.4			116[e]	16	86	3	2		
7/7 1530	329	69	8.7	98	169	7.6	—/1.50[c]		5.9/0.26		0.0/0.00	94/1.54		2.2/0.06			0.1			100[e]	15	75	0	6		
8/2 1130	365	66	9.1	99	172	7.5	—/1.52[c]		5.6/0.24		0.0/0.00	94/1.54		1.5/0.04			0.3			101[e]	14	76	0	2		
9/6 1220	500	72	8.4	97	176	7.7	20/1.00	6.8/0.56	6.4/0.28	0.9/0.02	0.0/0.00	94/1.54	8.0/0.17	5.0/0.14	1.5/0.02	0.0/0.00	0.3	9.3	Fe 0.12 Mn 0.32[d] PO_4 0.20 Zn 0.08	104[f]	15	78	1	2		
10/3 1100	381	66	8.5	93	174	7.6	—/1.56[c]		5.2/0.23		0.0/0.00	96/1.57		3.5/0.10			0.3			102[e]	13	78	0	10		
11/10 1230	220	54	10.3	97	188	7.5	—/1.62[c]		6.1/0.27		0.0/0.00	101/1.66		3.0/0.08			0.3			111[e]	14	81	0	5		
12/12 1715	205	50	7.8	70	201	7.3	—/1.86[c]		8.1/0.35		0.0/0.00	112/1.84		5.5/0.16			0.6			119[e]	16	93	1	11		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 1
ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

RUSSIAN RIVER, EAST FORK AT POTTER VALLEY P. H. (STA. 10a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in ppm / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/4 1310	193	41	11.5	92	146	7.2	1.42[c]		5.8 / 0.25		0.0 / 0.00	88 / 1.44		3.2 / 0.09			0.4			88[e]	15	71	0	40	Median 2.1	
2/17 0730	300	48	11.4	101	108	7.3	0.98[c]		4.0 / 0.17		0.0 / 0.00	54 / 0.89		0.8 / 0.02			0.1			65[e]	15	49	5	35	Maximum 23.	
3/13 1440	300	50	11.0	100	130	7.3	1.14[c]		4.2 / 0.18		0.0 / 0.00	66 / 1.08		1.5 / 0.04			0.3			78[e]	14	57	3	30	Minimum 0.13	
4/12 1320	305	51	10.2	94	137	7.4	1.24[c]		4.1 / 0.18		0.0 / 0.00	75 / 1.23		2.0 / 0.06			0.2			82[e]	13	62	0	8		
5/3 1210	309	53	10.3	98	134	7.3	16 / 0.80	4.9 / 0.40	4.8 / 0.21	0.9 / 0.02	0.0 / 0.00	75 / 1.23	5.8 / 0.12	2.0 / 0.06	0.0 / 0.00	0.2 / 0.01	0.2	10	Fe 0.04 Al 0.08 Zn 0.01 ABS 0.1 [d]	82[f]	15	60	0	5		
6/2 0705	211	60	8.7	90	148	7.6	1.32[c]		4.9 / 0.21		0.0 / 0.00	78 / 1.28		2.5 / 0.07			0.2			89[e]	14	66	2	3		
7/8 0745	106	66	8.4	94	152	7.6	1.38[c]		4.7 / 0.20		0.0 / 0.00	90 / 1.48		0.7 / 0.02			0.1			91[e]	13	69	0	6		
8/2 0925	90	68	8.8	99	150	7.9	1.44[c]		4.6 / 0.20		0.0 / 0.00	80 / 1.31		2.8 / 0.08			0.3			90[e]	12	72	6	2		
9/6 1020	269	60	8.8	91	150	7.7	19 / 0.95	5.0 / 0.41	4.5 / 0.20	0.7 / 0.02	0.0 / 0.00	81 / 1.33	7.0 / 0.15	2.0 / 0.06	0.5 / 0.01	0.0 / 0.00	0.2	10	Fe 0.06 Mn 0.26 Zn 0.04 [d]	89[f]	13	68	2	2		
10/3 0915	263	65	8.2	90	165	7.7	1.46[c]		4.5 / 0.20		0.0 / 0.00	90 / 1.48		3.0 / 0.08			0.3			99[e]	12	73	0	5		
11/10 1100	305	52	9.9	93	177	7.6	1.60[c]		4.9 / 0.21		0.0 / 0.00	99 / 1.62		3.2 / 0.09			0.2			106[e]	12	80	0	6		
12/12 1610	307	45	10.5	89	151	7.2	1.30[c]		5.3 / 0.23		0.0 / 0.00	76 / 1.25		5.2 / 0.15			0.5			91[e]	15	65	3	30		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 / 0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

SALMON RIVER AT SOMESBAR (STA. 2a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										
1/12 1135	645	43	-	-	104	7.6 / 7.5	0.94[c]		2.0 / 0.09		0.0 / 0.00	58 / 0.95	4.0 / 0.08	1.2 / 0.03			0.0			72[e]	9	47	0	4	Median 0.62	USGS
2/	NOT SAMPLED																									
3/9 1030	2,170	44	11.9	97	107	7.5 / 8.0	1.00[c]		2.4 / 0.10		0.0 / 0.00	62 / 1.02		0.1 / 0.00			0.0			74[e]	9	50	0	3	Maximum 6.2	
4/6 1130	4,170	47	11.7	99	73	7.4 / 7.8	0.75[c]		0.7 / 0.03		0.0 / 0.00	42 / 0.69		1.5 / 0.04			0.0			54[e]	4	37	3	2	Minimum 0.045-	
5/8 1615	2,170	52	10.8	98	77	7.3 / 7.8	11 / 0.55	1.9 / 0.16	1.5 / 0.07	0.5 / 0.01	0.0 / 0.00	44 / 0.72	1.8 / 0.04	0.2 / 0.01	0.0 / 0.00	0.1 / 0.01	0.1	13	Fe 0.01 d; PO_4 0.00; ABS 0.0	52[f]	9	36	0	0.8		
6/7 1730	2,840	54	10.6	98	51	7.3 / 7.6	0.48[c]		0.8 / 0.03		0.0 / 0.00	28 / 0.46		1.0 / 0.03			0.0			35[e]	6	24	1	2		
7/6 1210	645	63	9.7	100	87	7.7 / 7.8	0.80[c]		2.4 / 0.10		0.0 / 0.00	46 / 0.75		2.0 / 0.06			0.0			60[e]	11	40	2	1		
8/3 1545	258	-	-	-	115	8.2	1.02[c]		3.6 / 0.16		0.0 / 0.00	66 / 1.08		0.4 / 0.01			0.0			80[e]	14	51	0			
9/6 1430	166	70	9.6	107	130	8.1 / 8.6	18 / 0.90	3.6 / 0.30	3.3 / 0.14	1.0 / 0.03	3 / 0.10	67 / 1.10	4.4 / 0.09	4.8 / 0.14	0.0 / 0.00	0.0 / 0.00	0.0	16	Tot. Alk. 73 d; ABS 0.0; PO_4 0.00	87[f]	10	60	0	2		
10/4 1425	48	62	10.1	103	135	8.1 / 8.3	1.25[c]		2.7 / 0.12		2 / 0.07	73 / 1.20		2.7 / 0.08			0.0		Tot. Alk. 77	94[e]	9	62	0	3		
11/5 1400	252	49	11.4	99	122	7.8 / 8.1	1.11[c]		2.4 / 0.10		0.0 / 0.00	67 / 1.10		1.8 / 0.05			0.0			85[e]	8	56	1	2		
12/6 1435	680	44	12.0	98	111	7.4 / 8.1	1.04[c]		2.0 / 0.09		0.0 / 0.00	63 / 1.03		1.0 / 0.03			0.0			77[e]	8	52	0	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 1
ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

SCOTT RIVER NEAR FORT JONES (STA. 1b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos) at 25° C	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1/11 1700	274	44	10.9	89	193	7.3 / 8.0	1.78[c]		3.5 / 0.15		0.0 / 0.00	109 / 1.79	5.0 / 0.10	2.5 / 0.07			0.1			116[e]	8	89	0	10	Median 2.3	USGS
2/11 [illegible]	2,110	45	10.6	98	191	7.3 / 7.8	1.46[c]		2.7 / 0.12		0.0 / 0.00	92 / 1.51		1.0 / 0.03			0.0			96[e]	8	73	0	40	Maximum 23.	
3/7 1210	614	44	11.1	90	172	7.4 / 8.0	1.68[c]		3.3 / 0.14		0.0 / 0.00	102 / 1.67		1.0 / 0.03			0.0			109[e]	8	80	0	15	Minimum 0.06	
4/11 1300	920	54	10.7	99	141	7.3 / 8.0	1.12[c]		2.1 / 0.09		0.0 / 0.00	84 / 1.38		1.0 / 0.03			0.0			89[e]	6	71	2	10		
5/9 1130	65[illegible]	53	9.3	96	149	7.5 / 8.0	14 / 0.70	5.6 / 0.79	2.4 / 0.10	0.7 / 0.02	0.0 / 0.00	92 / 1.51	1.0 / 0.02	4.7 / 0.13	0.9 / 0.01	0.0 / 0.00	0.1	20	Fe 0.01 d PO_4 0.05 ABS 0.0	98[f]	6	75	0	3		
6/13 1220	275	64	8.4	95	11[illegible]	7.3 / [illegible]	[illegible]		2.3 / 0.1[illegible]		0.0 / 0.00	71 / 1.16		0.6 / 0.02			0.0			75[e]	7	62	4	7		
7/11 1630	462	67	8.2	[illegible]	238	7.3 / 7.6	2.04[c]		4.7 / 0.20		8 / 0.27	128 / 2.10		4.8 / 0.14			0.0		Tot. Alk. 144	151[e]	8	122	4	1		
8/1 [illegible]	71	62	7.1	76	282	7.4 / 8.0	2.73[c]		4.9 / 0.21		0.0 / 0.00	165 / 2.70		4.0 / 0.11			0.0			178[e]	7	137	2			
9/12 1315	55	63	10.7 [illegible]	110	288	7.9 / 8.3	35 / 1.75	15 / 1.23	4.3 / 0.19	0.9 / 0.02	1 / 0.03	174 / 2.85	5.0 / 0.10	6.0 / 0.17	2.1 / 0.03	0.1 / 0.01	0.1	19	Fe 0.01 ABS 0.0 d Cu 0.01 Tot. Alk. 176 PO_4 0.05	174[f]	6	149	5	6		
10/3 1615	67	63	[illegible]	91	282	7.5 / 8.4	2.76[c]		4.1 / 0.18		5 / 0.17	163 / 2.67		2.0 / 0.06			0.0		Tot. Alk. 173	178[e]	6	138	0	3		
11/14 1105	109	45	11.2	93	261	7.5 / 8.2	2.36[c]		3.9 / 0.17		0.0 / 0.00	159 / 2.61		3.4 / 0.10			0.0			165[e]	6	133	3	2		
12/5 1510	232	45	10.8	89	228	7.4 / 8.0	2.23[c]		3.6 / 0.16		0.0 / 0.00	138 / 2.26		3.8 / 0.11			0.0			144[e]	7	114	1	4		

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

SHASTA RIVER NEAR YREKA (STA. 1a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 6.2	USGS
1/11 1550	161	44	10.7	87	509	7.7/8.5	4.00[c]		39/1.70		10/0.33	273/4.47	9.0/0.19	24/0.68			0.5		Tot. Alk. 293	344[e]	30	200	0	15	Maximum 230.	
2/14 1550	344	47	10.8	92	482	8.3/8.4	4.32[c]		38/1.65		7/0.23	288/4.72		20/0.56			0.5		Tot. Alk. 302	325[e]	28	216	0	10	Minimum 0.13	
3/7 1530	236	50	10.8	96	500	8.3/8.6	3.82[c]		31/1.35		13/0.43	258/4.23		18/0.51			0.4		Tot. Alk 284	338[e]	35	191	0	15		
4/11 1600	64	63	10.2	105	492	8.4/9.0	4.40[c]		36/1.57		33/1.10	238/3.90		22/0.62			0.4		Tot. Alk. 305	332[e]	26	220	0	3		
5/9 1530	88	61	9.2	93	647	8.1/8.6	42/2.10	43/3.50	42/1.83	3.3/0.08	23/0.77	345/5.65	11/0.23	33/0.93	0.8/0.01	0.2/0.01	0.6	46	Fe 0.01 As 0.01 d Al 0.01 PO_4 0.45 Tot.Alk. 392 ABS0.0	415[f]	24	280	0	1		
6/14 0745	129	68	7.6	83	541	8.1/8.5	4.80[c]		41/1.78		18/0.60	295/4.84		19/0.54			0.6		Tot. Alk. 332	365[e]	27	240	0	5		
7/11 2000	12	85	7.5	97	671	8.4/8.7	5.56[c]		51/2.22		29/0.97	347/5.69		36/1.02			0.7		Tot. Alk. 406	453[e]	29	278	0	3		
8/1 0820	32	68	8.2	89	734	8.2/8.5	5.89[c]		58/2.52		17/0.57	408/6.69		40/1.13			0.7		Tot. Alk. 443	495[e]	30	295	0			
9/12 0750	29	60	8.8	88	642	8.1/8.5	38/1.90	39/3.22	55/2.39	4.5/0.12	11/0.37	353/5.79	9.0/0.19	36/1.02	0.2/0.00	0.3/0.02	0.7	55	Fe 0.03 Tot.Alk. 375 PO_4 0.45 ABS 0.0 d	422[f]	31	256	0	8		
10/3 1155	124	59	9.7	96	498	7.7/8.7	3.90[c]		38/1.65		13/0.43	264/4.33		24/0.68			0.5		Tot. Alk. 290	336[e]	30	195	0	3		
11/14 0830	179	43	11.6	94	491	8.0/8.6	3.80[c]		37/1.61		13/0.43	261/4.28		24/0.68			0.5		Tot. Alk. 288	331[e]	30	190	0	3		
12/5 0910	231	44	10.0	81	570	8.1/8.5	4.42[c]		45/1.96		23/0.77	283/4.64		26/0.73			0.7		Tot. Alk. 329	385[e]	31	221	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 1
ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

SMITH RIVER NEAR CRESCENT CITY (STA. 3a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/11 1350	1,720	46	11.7	98	99.7	7.3 / 7.6	— / 0.98[c]		1.7 / 0.07		0.0 / 0.00	60 / 0.98	1.0 / 0.02	1.8 / 0.05			0.1			62[e]	7	49	0	8	Median 0.62	USGS
2/8 1515	4,650	48	11.7	101	88.1	7.3 / 7.9	— / 0.84[c]		2.0 / 0.09		0.0 / 0.00	51 / 0.84		3.2 / 0.09			0.0			55[e]	10	42	0	4	Maximum 230.	
3/8 1630	7,300	48	11.5	99	82	7.3 / 8.0	— / 0.68[c]		3.7 / 0.16		0.0 / 0.00	48 / 0.79		1.4 / 0.04			0.0			51[e]	19	34	0	6	Minimum 0.045-	
4/5 1445	4,820	53	11.7	107	76	7.3 / 7.8	— / 0.76[c]		0.6 / 0.03		0.0 / 0.00	42 / 0.69		2.9 / 0.08			0.0			47[e]	4	38	4	2		
5/9 1015	5,560	50	11.5	102	80	7.3 / 7.8	4.9 / 0.24	6.2 / 0.51	1.4 / 0.06	0.0 / 0.00	0.0 / 0.00	45 / 0.74	0.0 / 0.00	1.7 / 0.05	0.2 / 0.00	0.0 / 0.00	0.0	13	Fe 0.02 d; PO_4 0.00; ABS 0.0	49[f]	7	37	0	5		
6/7 1045	1,810	54	11.4	106	88	7.3 / 7.9	— / 0.86[c]		0.8 / 0.03		0.0 / 0.00	48 / 0.79		3.6 / 0.10			0.0			55[e]	3	43	4			
7/5 1440	690	62	10.2	104	114	7.8 / 8.0	— / 1.14[c]		1.9 / 0.08		0.0 / 0.00	62 / 1.02		3.9 / 0.11			0.0			71[e]	7	57	6	1		
8/2 1550	392	69	9.3	102	125	7.9 / 8.2	— / 1.19[c]		2.7 / 0.12		0.0 / 0.00	74 / 1.21		2.0 / 0.06			0.0			78[e]	9	60	0			
9/5 1620	288	68	9.2	100	133	7.9 / 8.2	7.2 / 0.36	12 / 1.00	2.6 / 0.11	0.2 / 0.01	0.0 / 0.00	76 / 1.25	4.0 / 0.08	4.8 / 0.14	0.0 / 0.00	0.0 / 0.00	0.0	13	Cu 0.01 PO_4 0.00 d; ABS 0.0	81[f]	7	68	6	1		
10/3 1650	250	60	10.1	101	137	7.9 / 8.0	— / 1.35[c]		2.0 / 0.09		0.0 / 0.00	80 / 1.31		2.9 / 0.08			0.0			86[e]	6	68	2	4		
11/7 1715	680	49	11.2	97	119	7.3 / 8.1	— / 1.20		1.5 / 0.07		0.0 / 0.00	71 / 1.16		2.5 / 0.07			0.0			74[e]	6	60	2	2		
12/5 1610	3,190	50	11.7	104	92	7.1 / 7.8	— / 0.90[c]		1.5 / 0.07		0.0 / 0.00	51 / 0.84		1.5 / 0.04			0.0			57[e]	7	45	3	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

TRINITY RIVER NEAR BURNT RANCH (STA. 4b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										
1/12 1410	1,450	44			124	7.6/7.9	—/1.12[c]		3.3/0.14		0.0/0.00	70/1.15	4.0/0.08	3.2/0.09			0.1			79[e]	11	56	0	4		USGS
2/9 1025	2,200	47	11.7	99	117	7.3/7.9	—/1.10[c]		2.5/0.11		0.0/0.00	69/1.13		1.5/0.04			0.1			74[e]	9	55	0	5		
3/9 1320	1,570	46	11.6	97	153	7.3/8.2	—/1.43[c]		2.9/0.13		0.0/0.00	85/1.39		1.1/0.03			0.1			97[e]	8	72	2	6		
4/6 1520	1,710	55	10.3	97	119	7.5/8.0	—/1.20[c]		1.3/0.06		0.0/0.00	68/1.11		2.6/0.07			0.0			76[e]	5	60	4	6		
5/8 1345	1,230	56	9.9	94	131	7.5/7.9	15/0.75	5.7/0.47	2.9/0.13	0.6/0.02	0.0/0.00	73/1.20	5.0/0.10	3.2/0.09	0.3/0.00	0.1/0.01	0.0	17	Al 0.01[d]; PO_4 0.05; ABS 0.0	86[f]	9	61	1	2		
6/8 0845	1,390	60	9.8	98	93	7.5/7.9	—/0.86[c]		1.1/0.05		0.0/0.00	47/0.77		2.7/0.08			0.0			59[e]	5	43	4			
7/6 1530	592	70	9.2	102	123	7.3/8.0	—/1.14[c]		3.2/0.14		0.0/0.00	65/1.07		5.0/0.14			0.0			78[e]	11	57	4	2		
8/4 0950	332	76	7.9	93	151	7.9/8.0	—/1.35[c]		4.6/0.20		0.0/0.00	82/1.34		3.8/0.11			0.0			96[e]	13	67	0			
9/6 1655	265	72	8.7	99	162	8.1/8.3	17/0.85	7.7/0.63	4.6/0.20	0.7/0.02	1/0.03	82/1.34	5.0/0.10	7.0/0.20	0.0/0.00	0.0/0.00	0.0	11	Fe 0.05; Tot. Alk. 84; Cu 0.01[d]; PO_4 0.00; ABS 0.0	94[f]	12	74	5	3		
10/4 1615	284	66	9.5	101	164	7.9/8.2	—/1.46[c]		3.9/0.17		0.0/0.00	86/1.41		6.5/0.18			0.0			104[e]	10	73	2	4		
11/8 1600	398	47	11.0	93	150	7.6/8.1	—/1.36[c]		3.2/0.14		0.0/0.00	80/1.31		5.2/0.15			0.0			95[e]	9	68	2	3		
12/6 1705	744	46	11.3	95	149	7.8/8.0	—/1.38[c]		3.5/0.15		0.0/0.00	75/1.23		4.2/0.12			0.0			95[e]	10	69	7	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 1
ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

TRINITY RIVER NEAR HOOPA (STA. 4)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/12 0830	1,650	45			145	7.4 / 7.8	— / 1.34[c]		3.3 / 0.14		0.0 / 0.00	81 / 1.33	5.0 / 0.10	3.0 / 0.08			0.1			88[e]	9	67	1	5	Median 1.3	USGS
2/9 0953	6,980	49	11.0	96	139	7.3 / 7.9	— / 1.30[c]		3.0 / 0.13		0.0 / 0.00	76 / 1.25		2.5 / 0.07			0.1			85[e]	9	65	3	47	Maximum 6.2	
3/9 0830	6,010	45	11.3	93	151	7.5 / 8.2	— / 1.46[c]		1.6 / 0.07		0.0 / 0.00	85 / 1.39		0.5 / 0.01			0.0			92[e]	5	73	3	15	Minimum 0.045-	
4/6 0915	8,800	51	11.0	98	127	7.7 / 8.0	— / 1.28[c]		1.0 / 0.04		0.0 / 0.00	70 / 1.15		3.0 / 0.08			0.1			77[e]	3	64	7	20		
5/8 1830	4,110	56	10.6	101	131	7.3 / 8.0	16 / 0.80	5.6 / 0.46	2.3 / 0.10	0.4 / 0.01	0.0 / 0.00	74 / 1.21	5.0 / 0.10	2.0 / 0.06	0.2 / 0.00	0.1 / 0.01	0.0	16	Al 0.04 d; PO_4 0.10; ABS 0.0	84[f]	7	63	2	2		
6/7 1930	3,430	60	10.5	105	118	7.5 / 8.0	— / 1.17[c]		0.9 / 0.04		0.0 / 0.00	64 / 1.05		3.8 / 0.11			0.0			72[e]	3	59	7	2		
7/6 0930	1,250	66	9.1	97	155	8.0 / 8.1	— / 1.47[c]		3.1 / 0.13		0.0 / 0.00	82 / 1.34		4.4 / 0.12			0.0			95[e]	8	74	7	1		
8/3 1145	610	74	8.3	97	182	7.9 / 8.2	— / 1.69[c]		5.1 / 0.22		0.0 / 0.00	107 / 1.75		3.6 / 0.10			0.0			111[e]	12	84	0			
9/6 1145	436	70	8.8	98	195	7.9 / 8.3	23 / 1.15	8.3 / 0.68	4.8 / 0.21	0.8 / 0.02	2 / 0.07	100 / 1.64	7.6 / 0.16	6.1 / 0.17	0.0 / 0.00	0.0 / 0.00	0.2	15	Fe 0.01; Tot. Alk. 104 d; Cu 0.02; PO_4 0.00; ABS 0.0	117[f]	10	92	7	2		
10/4 1215	415	65	9.6	101	198	7.9 / 8.2	— / 1.84[c]		4.1 / 0.18		0.0 / 0.00	105 / 1.72		6.4 / 0.18			0.0			121[e]	9	92	6	4		
11/8 1130	666	50	11.1	98	187	7.6 / 8.2	— / 1.74[c]		3.7 / 0.16		0.0 / 0.00	100 / 1.64		5.8 / 0.16			0.0			114[e]	8	87	5	3		
12/6 1155	2,220	47	11.4	97	164	7.5 / 7.9	— / 1.64[c]		3.1 / 0.13		0.0 / 0.00	88 / 1.44		4.0 / 0.11			0.0			100[e]	7	82	10	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

TRINITY RIVER AT LEWISTON (STA. 4a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/12 1540	463	45	12.1	100	168	[illegible] / 7.8	1.02[c]		2.9 / 0.13		[illegible] / 0.00	62 / 1.02	4.0 / 0.08	2.5 / 0.07			0.1			68[e]	11	51	0	20	Median 2.3	USGS
2/9 1335	380	44	11.5	93	123	7.3 / 7.9	1.16[c]		3.2 / 0.14		0.0 / 0.00	67 / 1.10		3.0 / 0.06			0.1			78[e]	11	58	3	13	Maximum 23.	
3/9 1450	1 2	44	11.7	95	11[illegible]	[illegible] / [illegible]	[illegible][c]		1.2 / 0.05		0.0 / 0.00	65 / 1.07		0.6 / 0.02			0.0			74[e]	19	48	0	20	Minimum 0.045 –	
4/7 0815	275	49	10.5	[illegible]	11[illegible]	7.6 / 7.6	1.00[c]		1.4 / 0.06		0.0 / 0.00	76 / 1.00		3.1 / 0.09			0.0			73[e]	5	55	1	6		
5/3 1205	175	56	10.9	104	1[illegible]	7.6 / 7.[illegible]	0.4 / 0.32	[illegible] / 0.72	2.5 / 0.11	0.6 / 0.02	0.0 / 0.00	62 / 1.02	4.0 / 0.08	1.8 / 0.05	0.3 / 0.00	0.1 / 0.01	0.0	15	Al 0.10 d; PO_4 0.05; As 0.01; ABS 0.0	70[f]	9	52	1	3		
6/8 1030	175	66	10.7	102	112	7.6 / [illegible]	[illegible][c]		1.2 / 0.05		0.0 / 0.00	61 / 1.00		4.2 / 0.12			0.0			71[e]	5	52	2	40		
7/7 [illegible]	1[illegible]2	[illegible]	10.1	97	104	7.7 / [illegible]	1.[illegible][c]		2.4 / 0.10		0.0 / 0.00	58 / 0.95		2.9 / 0.08			0.1			66[e]	9	50	2	2		
8/4 1145	175	64	10.0	104	99	7.6 / 7.9	[illegible][c]		2.8 / 0.12		0.0 / 0.00	58 / 0.95		0.8 / 0.02			0.0			63[e]	12	45	0			
9/7 0[illegible]10	[illegible]2	[illegible]	10.1	95	99	7.6 / 7.[illegible]	0.4 / 0.32	7.7 / 0.63	2.3 / 0.10	0.5 / 0.01	0.0 / 0.00	56 / 0.92	1.4 / 0.03	2.5 / 0.07	0.1 / 0.00	0.0 / 0.00	0.0	15	Fe 0.12 d; Cu 0.02; PO_4 0.00; ABS 0.0	64[f]	9	48	2	4		
10/[illegible] [illegible]-45	225	52	10.5	95	99	7.5 / 7.9	[illegible][c]		1.7 / 0.07		0.0 / [illegible]	56 / [illegible]		1.4 / [illegible]			0.0			63[e]	7	46	0	4		
11/3 1725	[illegible]7	[illegible]	[illegible]	93	100	7.3 / [illegible]	[illegible][c]		1.9 / 0.08		0.0 / 0.00	5[illegible] / [illegible]		1.0 / [illegible]			0.0			63[e]	8	46	0	4		
12/7 0910	219	44	11.3	92	106	7.3 / [illegible]	[illegible][c]		2.2 / 0.10		0.0 / 0.00	60 / [illegible]		1.0 / 0.03			0.0			67[e]	9	52	3	25		

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 1

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (1)

VAN DUZEN RIVER NEAR BRIDGEVILLE (STA. 5a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/10 1440	270	44	9.4	76	145	7.5/7.9	—/1.30[c]		3.8/0.17		0.0/0.00	76/1.25	11/0.23	2.5/0.07			0.1			90[e]	12	65	3	3	Median 0.62	USGS
2/7 1525	1,680	48	11.0	95	122	7.3/7.9	—/1.12[c]		3.4/0.15		0.0/0.00	65/1.07		2.0/0.06			0.1			76[e]	12	56	3	23	Maximum 620.	
3/7 1730	972	47	10.9	92	115	7.5/7.9	—/1.00[c]		3.7/0.16		0.0/0.00	60/0.98		0.2/0.01			0.1			71[e]	14	50	1	40	Minimum 0.23	
4/4 1430	956	56	10.4	99	105	7.6/7.9	—/1.00[c]		1.0/0.04		0.0/0.00	56/0.92		2.0/0.06			0.0			65[e]	4	50	4	9		
5/10 1150	2,120	50	10.4	92	104	7.3/7.4	12/0.60	4.1/0.34	2.7/0.12	1.0/0.03	0.0/0.00	54/0.89	6.0/0.12	1.5/0.04	0.4/0.01	0.1/0.01	0.1	14	Al 0.18 d; PO_4 0.10; As 0.02 ABS 0.0	69[f]	11	47	-3	60		
6/6 1600	199	62	10.0	102	151	7.6/8.1	—/1.12[c]		3.7/0.16		0.0/0.00	82/1.34		2.7/0.08			0.0			94[e]	10	71	4	3		
7/4 1510	51.5	68	9.9	108	189	8.3/8.4	—/1.78[c]		5.0/0.22		3/0.10	92/1.51		3.8/0.11			0.1		Tot. Alk. 98	117[e]	11	89	9	1		
8/2 0755	20	67	8.5	91	225	7.9/8.2	—/2.02[c]		7.0/0.30		0.0/0.00	126/2.07		3.4/0.10			0.1			140[e]	13	101	0			
9/5 0750	13.0	65	8.5	89	246	7.7/8.2	32/1.60	8.0/0.66	7.5/0.33	1.0/0.03	0.0/0.00	131/2.15	17/0.35	5.0/0.14	0.1/0.00	0.1/0.01	0.2	10	Fe 0.01 d; Cu 0.02; PO_4 0.00 ABS 0.0	146[f]	13	113	6	1		
10/3 0900	11	59	9.8	96	252	7.9/8.1	—/2.29[c]		6.4/0.28		0.0/0.00	132/2.16		4.6/0.13			0.1			156[e]	11	115	7	4		
11/7 0855	21	49	11.0	96	228	7.7/8.3	—/2.09[c]		5.0/0.22		1/0.03	113/1.85		4.0/0.11			0.1		Tot. Alk. 115	141[e]	10	104	10	3		
12/5 0855	592	48	11.3	97	131	7.3/7.7	—/1.18[c]		3.1/0.13		0.0/0.00	62/1.02		2.0/0.06			0.1			81[e]	10	59	8	15		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (2)

ALAMEDA CREEK NEAR NILES (STA. 73)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/10 1045	0.6	47	12.7	107	891	8.1	7.36[c]		24 / 1.04		0.0 / 0.00	334 / 5.47		60 / 1.69			0.8			544[e]	12	368	94	6	Median 1.3	
2/14 1115	3.4	54	10.1	94	1,020	7.7	7.65[c]		74 / 3.22		0.0 / 0.00	306 / 5.02		91 / 2.57			0.7			621[e]	30	382	131	10	Maximum 6.2	
3/7 1150	1.2	57	11.1	107	1,040	8.0	7.90[c]		71 / 3.09		0.0 / 0.00	310 / 5.08		85 / 2.40			1.0			634[e]	28	395	141	3	Minimum 0.2	
4/11 1300	0.9	66	9.2	98	946	7.9	7.44[c]		67 / 2.91		0.0 / 0.00	309 / 5.06		67 / 1.89			1.0			577[e]	28	372	119	2		
5/2 1025	1.0	66	10.5	112	937	8.1	60 / 2.99	51 / 4.21	72 / 3.04	9.0 / 0.23	2 / 0.07	301 / 4.93	147 / 3.06	71 / 2.00	0.6 / 0.01	0.3 / 0.02	0.9	1.8	Al 0.13 Cu 0.01[d] Tot. Alk. 305	562[f]	29	360	110	6		
6/6 0910	0.4	67	8.9	96	939	8.1	7.03[c]		72 / 3.13		0.0 / 0.00	307 / 5.03		64 / 1.80			0.8			572[e]	31	351	99	1		
7/11 0800	Dry																									
8/3 1445	Dry																									
9/11 1515	Dry																									
10/4 1115	Dry																									
11/7 0900	Dry																									
12/7 1115	Dry																									

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 2
ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (2)

ARROYO DEL VALLE NEAR LIVERMORE (STA. 71)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/10 1000	0.1	45	6.7	56	1,760	7.6	12.10[c]		159 / 6.92		0.0 / 0.00	490 / 8.03		208 / 5.87			3.3			1,085[e]	36	605	203	4		
2/14 1020	8.6	54	9.9	94	785	7.3	6.70[c]		15 / 0.65		0.0 / 0.00	324 / 5.31		35 / 0.99			0.7			484[e]	9	335	69	5		
3/7 1030	3.4	52	11.8	108	830	7.9	6.92		46 / 2.00		0.0 / 0.00	336 / 5.51		42 / 1.18			0.7			510[e]	22	346	70	2		
4/11 1215	8.6	66	10.3	112	744	8.1	6.16[c]		44 / 1.91		8 / 0.27	308 / 5.05		34 / 0.96			0.9		Tot. Alk. 324	458[e]	24	308	42	0.6		
5/2 0945	1.6	62	9.2	96	760	7.9	68 / 3.39	38 / 3.13	50 / 2.18	3.1 / 0.08	0.0 / 0.00	336 / 5.51	96 / 2.00	35 / 0.99	1.0 / 0.02	0.2 / 0.01	1.0	18	Al 0.15 Cu 0.02[d]	476[f]	25	326	50	3		
6/6 0830	0.5	65	6.9	74	887	7.8	6.99[c]		64 / 2.78		0.0 / 0.00	360 / 5.90		56 / 1.58			1.1			546[e]	28	350	55	1		
7/11 0715	0.2	73	4.5	53	962	7.8	7.24[c]		74 / 3.22		0.0 / 0.00	388 / 6.36		66 / 1.86			1.7			593[e]	31	362	44	6		
8/3 1410	0.1	82	12.4	159	1,030	8.1	7.24[c]		92 / 4.00		0.0 / 0.00	391 / 6.41		92 / 2.59			1.9			634[e]	36	362	41	1		
9/11 1445	Dry																									
10/4 1045	Dry																									
11/7 0830	Dry																									
12/7	Dry																									

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+5}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

SAN FRANCISCO BAY REGION (NO. 2)
CARQUINEZ STRAIT AT MARTINEZ (STA. 28a)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids[g] in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1/20 1245		45			15412				2553					5112						10354	72					USBR
2/20 1425		--			295															248						USBR
3/15 1340		--			10549															7200						USBR
4/12 1125		62			13812															9456						USBR
5/10 1200		62			16761															11868						USBR
6/14 1210		68			11350															7648						USBR
7/20 1430		64			24000															18242						USBR
8/16 1145		68			24828															18676						USBR
9/19 1115		67			20363															14214						USBR
10/11 0930		62			--				15820											21734						USBR
11/15 1010		--			26275															19260						USBR
12/13 1040		50			20857															14424						USBR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 2
ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (2)

COYOTE CREEK NEAR MADRONE (STA. 82)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										UBGS
1/11 1445	7.4	50	13.3	118	419	8.3	3.64[c]		17 / 0.74		0.0 / 0.00	197 / 3.23		12 / 0.34			0.2			245[e]	17	182	20	18	Median 23.	
2/15 1320	4.8	50	10.7	95	390	7.8	3.36[c]		16 / 0.70		3 / 0.10	174 / 2.85		12 / 0.34			0.1		Tot. Alk. 180	228[e]	17	168	20	10	Maximum 230.	
3/8 1240	2.8	54	12.5	117	393	7.9	3.84[c]		17 / 0.74		0.0 / 0.00	181 / 2.97		10 / 0.28			0.2			230[e]	16	192	44	55	Minimum 2.1	
4/12 1415	69	50	10.5	93	412	7.7	3.64[c]		17 / 0.74		0.0 / 0.00	195 / 3.20		10 / 0.28			0.1			241[e]	17	182	22	20		
5/3 1145	112	62	10.4	107	494	8.1	57 / 2.84	22 / 1.80	20 / 0.87	7.3 / 0.19	6 / 0.20	236 / 3.87	49 / 1.02	13 / 0.37	1.1 / 0.02	0.3 / 0.02	0.1	13	Al 0.14 PO_4 0.05[d] Tot. Alk. 248	305[f]	15	232	29	5		
6/7 1200	Ponded - No Flow																									
7/12 0915	Dry																									
8/7 0945	Dry																									
9/7 0945	Dry																									
10/4 1210	Dry																									
11/7 1015	Dry																									
12/5 1420	Dry																									

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

TABLE

SAN FRANCISCO BAY REGION (2)

LOS GATOS CREEK AT LOS GATOS (STA. 74)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/10 1240	1.8	48	11.8	103	726	8.1	6.84[c]		26 / 1.13		0.0 / 0.00	311 / 5.10		12 / 0.34			0.1			443[e]	14	342	87	8	Median 6.2	
2/15 1350	10	58	9.3	92	685	7.7	6.30[c]		33 / 1.44		0.0 / 0.00	244 / 4.00		16 / 0.45			0.1			418[e]	19	315	115	50	Maximum 2,400.	
3/7 1310	6.2	54	11.7	110	746	8.1	7.00[c]		27 / 1.17		0.0 / 0.00	275 / 4.51		19 / 0.54			0.2			455[e]	14	350	125	8	Minimum 0.29	
4/11 1430	1.4	64	9.0	105	777	8.1	7.40[c]		33 / 1.44		6 / 0.20	268 / 4.39		20 / 0.56			0.3		Tot. Alk. 280	474[e]	16	370	40	6		
5/2 1125	3.5	61	10.0	103	780	8.1	100 / 4.99	33 / 2.69	30 / 1.31	2.7 / 0.07	2 / 0.07	282 / 4.62	167 / 3.48	19 / 0.54	0.8 / 0.01	0.3 / 0.02	0.1	14	Al 0.10 Cu 0.01[d] Tot. Alk. 286	508[f]	15	384	149	21		
6/6 1310	0.5	68	8.3	92	839	7.9	8.18[c]		32 / 1.39		0.0 / 0.00	334 / 5.47		22 / 0.62			0.2			512[e]	15	409	135	2		
7/11 0930	0.3	69	8.4	94	849	7.9	8.48[c]		32 / 1.39		0.0 / 0.00	362 / 5.93		23 / 0.65			0.3			517[e]	14	424	127	5		
8/4 0930	0.1	66	8.3	90	835	7.8	8.08[c]		11 / 0.48		0.0 / 0.00	353 / 5.79		26 / 0.73			0.4			510[e]	6	404	115	1		
9/12 0830	0.1	62	8.5	88	775	8.0	85 / 4.24	40 / 3.30	28 / 1.22	2.5 / 0.06	0.0 / 0.00	365 / 5.98	112 / 2.33	16 / 0.45	0.3 / 0.00	0.1 / 0.01	0.3	17	Fe 0.04 Al 1.1[d] PO_4 0.05 Zn 0.04	481[f]	14	377	78	6		
10/5 1410	0.1	65	9.8	105	818	7.9	7.96[c]		30 / 1.30		6 / 0.20	388 / 6.36		20 / 0.56			0.2		Tot. Alk. 400	499[e]	14	398	70	15		
11/8 1200	0.1	55			827	7.9	8.04[c]		33 / 1.44		0.0 / 0.00	370 / 6.06		22 / 0.62			0.3			504[e]	15	402	99	4		
12/6 1450	106	53	10.1	94	441	7.4	3.82[c]		18 / 0.78		0.0 / 0.00	126 / 2.07		16 / 0.45			0.1			269[e]	17	191	88	40		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (2)

NAPA RIVER NEAR ST. HELENA (STA. 72)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in ppm / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/5 0905	7.6	41	8.4	66	295	6.9	1.72[c]		26 / 1.13		0.0 / 0.00	108 / 1.77		30 / 0.85			0.9			197[e]	40	86	0	6	Median 62.	
2/17 1445	185	54	9.8	92	162	7.3	1.12[c]		11 / 0.48		0.0 / 0.00	62 / 1.02		9.0 / 0.25			0.1			108[e]	30	56	5	15	Maximum 7,000.+	
3/1 1000	75	55	9.9	94	218	7.3	1.41[c]		16 / 0.70		0.0 / 0.00	85 / 1.39		13 / 0.37			0.4			145[e]	33	71	1	3	Minimum 0.62	
4/13 1215	33	63	9.7	101	244	7.2	1.60[c]		17 / 0.74		0.0 / 0.00	101 / 1.66		16 / 0.45			0.6			163[e]	32	80	0	0.5		
5/4 1020	21	60	8.8	89	272	7.2	19 / 0.95	11 / 0.87	21 / 0.91	2.4 / 0.06	0.0 / 0.00	110 / 1.80	16 / 0.33	18 / 0.51	3.4 / 0.05	0.4 / 0.02	0.5	43	Al 0.10 PO_4 0.45[d] ABS 0.1	189[f]	35	91	1	23		
6/1 0855	7.5	64	5.5	58	320	7.0	2.14[c]		25 / 1.09		0.0 / 0.00	130 / 2.13		24 / 0.68			0.7			213[e]	34	107	0	1		
7/7 1020	0.8	72	9.3	108	365	7.3	3.02[c]		20 / 0.87		0.0 / 0.00	182 / 2.98		13 / 0.37			0.6			244[e]	22	151	2	5		
8/2 1450	0.2	73	7.1	82	360	7.2	3.04[c]		19 / 0.83		0.0 / 0.00	185 / 3.03		14 / 0.39			0.5			240[e]	21	152	0	1		
9/6 1535	0.4	68	2.0	22	375	7.1	32 / 1.60	18 / 1.52	19 / 0.83	2.7 / 0.07	0.0 / 0.00	196 / 3.21	18 / 0.37	13 / 0.37	0.1 / 0.00	0.0 / 0.00	0.4	29	Fe 0.12 Mn 0.61[d] PO_4 0.30 Zn 0.02	229[f]	21	156	0	2		
10/3 1605	0.2	63	0.7	7.3	379	6.9	3.16[c]		19 / 0.83		0.0 / 0.00	200 / 3.28		12 / 0.34			0.4			253[e]	21	158	0	5		
11/8 1605	0.4	55	1.2	11	374	6.8	3.22[c]		18 / 0.78		0.0 / 0.00	192 / 3.15		11 / 0.31			0.5			249[e]	20	161	4	1		
12/11 1050	8.2	46	6.0	50	340	7.0	2.28[c]		26 / 1.13		0.0 / 0.00	118 / 1.93		31 / 0.87			0.8			227[e]	33	114	17	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc (TTL), or California Department of Water Resources (DWR), as indicated.

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TABLE [illegible]

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (3)

CARMEL RIVER AT ROBLES DEL RIO (STA. 83)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/11 0840	3.6	48	10.4	90	686	7.5	5.08[c]		43 / 1.87		0.0 / 0.00	198 / 3.25		46 / 1.30			0.0			425[e]	27	254	92	7	Median 2.9	
2/15 0830	6.8	53	9.2	85	542	7.3	3.66[c]		31 / 1.35		0.0 / 0.00	166 / 2.72		36 / 1.02			0.1			336[e]	27	183	47	3	Maximum 23.	
3/8 0850	1.2	50	9.4	84	828	7.3	5.58[c]		62 / 2.70		0.0 / 0.00	225 / 3.69		66 / 1.86			0.1			514[e]	33	279	95	5	Minimum 0.23	
4/12 0930	0.3	58	9.5	93	844	7.4	6.16[c]		58 / 2.52		0.0 / 0.00	228 / 3.74		67 / 1.89			0.1			523[e]	29	308	121	1		
5/3 0700	1.1	58	6.2	61	789	7.3	78 / 3.89	23 / 1.91	60 / 2.61	5.0 / 0.13	0.0 / 0.00	215 / 3.52	139 / 2.89	63 / 1.78	0.0 / 0.00	0.4 / 0.02	0.0	21	Al 0.09 Cu 0.01 [d]	495[f]	31	290	114	10		
6/7 0810	Dry																									
7/12 0630	Dry																									
8/7 1600	Dry																									
9/7 1530	Dry																									
10/5 0920	Dry																									
11/7 1600	Dry																									
12/6 1130	Dry																									

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 3

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (3)

PAJARO RIVER AT CHITTENDEN (STA. 77)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/11 1040	7.0	45	11.2	92	1,350	8.1	—/9.32[c]		100/4.35		0.0/0.00	470/7.70		120/3.38			0.6			852[e]	32	466	81	6	Median 23.	
2/15 1105	7.9	58	9.4	92	1,340	7.7	—/9.90[c]		100/4.35		0.0/0.00	396/6.49		118/3.33			0.7			846[e]	31	495	170	10	Maximum 2,400.	
3/8 1125	7.6	56	10.8	103	1,330	7.9	—/10.16[c]		100/4.35		0.0/0.00	398/6.52		110/3.10			0.7			840[e]	30	508	182	5	Minimum 0.62	
4/12 1200	7.9	60	8.3	83	1,400	7.9	—/10.36[c]		108/4.70		6/0.20	510/8.36		108/3.05			0.7		Tot. Alk. 522	885[e]	31	518	90	1		
5/3 1005	4.8	63	9.3	96	1,500	8.1	93/4.64	69/5.68	146/6.35	3.6/0.09	11/0.37	440/7.21	237/4.93	142/4.00	3.7/0.06	0.3/0.02	1.0	16	Fe 0.01 Cu 0.01 Al 0.26 PO_4 0.05 Tot. Alk. 462 [d]	940[f]	38	516	137	15		
6/7 1010	2.7	66	7.9	84	1,460	8.1	—/8.96[c]		159/6.92		11/0.37	466/7.64		143/4.03			0.8		Tot. Alk. 488	921[e]	44	448	48	3		
7/12 0810	0.4	63	7.3	75	1,670	8.1	—/9.10[c]		200/8.70		10/0.33	531/8.70		211/5.95			1.1		Tot. Alk. 551	1,050[e]	49	455	3	3		
8/7 1055	0.2	73	10.1	116	1,560	8.3	—/9.04[c]		184/8.00		31/1.03	494/8.10		159/4.48			1.0		Tot. Alk. 557	984[e]	47	452	0	6		
9/7 1050	0.6	68	11.9	131	1,600	8.3	67/3.34	70/5.78	196/8.53	4.4/0.11	22/0.73	514/8.42	169/3.52	170/4.79	1.3/0.02	0.3/0.02	1.7	19	Fe 0.09 Al 0.05 Mn 0.15 PO_4 0.55 Cu 0.01 As 0.01 [d]	973[f]	48	456	0	4		
10/4 1605	0.1	70	11.8	131	1,880	8.4	—/9.00[c]		252/10.96		34/1.13	474/7.77		308/8.69			1.2		Tot. Alk. 544	1,186[e]	55	450	4	5		
11/7 1145	0.1	52	12.8	116	1,840	8.2	—/8.20[c]		252/10.96		2/0.40	480/7.87		310/8.74			1.5		Tot. Alk. 504	1,161[e]	57	410	0	3		
12/5 1550	0.5	54	9.9	92	1,950	8.2	—/9.60[c]		254/11.05		0.0/0.00	573/9.39		304/8.58			1.5			1,230[e]	54	480	10	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE G - 3

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (3)

SALINAS RIVER NEAR SPRECKELS (STA. 43)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/11 0945	2	51	1.7	15	1,280	7.3	7.50[c]		114 / 4.96		0.0 / 0.00	496 / 8.13		123 / 3.47			0.3			750[e]	40	375	0	15	Median 62.	
2/15 0925	1.2	59	2.8	28	1,090	7.1	5.02[c]		120 / 5.22		0.0 / 0.00	342 / 5.61		130 / 3.67			0.3			639[e]	51	251	0	80	Maximum 2,400.	
3/8 0925	1.0	54	4.2	39	1,030	7.1	4.12[c]		118 / 5.13		0.0 / 0.00	305 / 5.00		130 / 3.67			0.5			610[e]	55	206	0	5	Minimum 6.2	
4/12 1030	0.8	60	2.4	24	1,120	7.0	4.88[c]		126 / 5.48		0.0 / 0.00	242 / 3.97		138 / 3.89			0.6			657[e]	53	244	46	3		
5/3 0800	1.2	62	1.2	12	1,110	7.1	51 / 2.54	29 / 2.42	122 / 5.52	14 / 0.36	0.0 / 0.00	266 / 4.36	105 / 2.19	128 / 3.61	29 / 0.47		0.5	50	Fe 0.04 Cu 0.04[d] Al 0.14 Zn 0.15 Mn 0.11 ABS 6.8 PO_4 45	665[f]	51	248	30	37		
6/7 0900	1.3	66	1.4	15	1,190	7.1	60 / 2.99	32 / 2.61	149 / 6.48		0.0 / 0.00	245 / 4.02		143 / 4.03			0.5			698[e]	54	280	79	4		
7/12 0700	1.0	67	0.3	3.2	1,300	7.2	6.50[c]		138 / 6.00		0.0 / 0.00	313 / 5.13		162 / 4.57			0.5			762[e]	48	325	68	8		
8/7 1500	1.0	73	1.0	11	1,280	7.2	5.84[c]		135 / 5.87		0.0 / 0.00	336 / 5.51		152 / 4.29			0.6			750[e]	50	292	16	2		
9/7 1615	0.6	67	1.7	18	1,120	7.2	33 / 1.65	43 / 3.53	132 / 5.74	14 / 0.36	0.0 / 0.00	246 / 4.03	99 / 2.06	152 / 4.29	1.6 / 0.03		0.4	50	Fe 0.21 Mn 0.47[d] PO_4 7.3 Zn 0.02 ABS 8.1	662[f]	51	259	57	20		
10/5 0830	0.8	64	0.4	4.2	1,140	7.2	4.72[c]		122 / 5.31		0.0 / 0.00	321 / 5.26		153 / 4.31			0.4			669[g]	53	236	0	30		
11/7 1630	0.7	58	0.5	4.9	968	7.1	4.04		115 / 5.00		0.0 / 0.00	192 / 3.15		141 / 3.98			0.3		Tot. Alk. 192	568[e]	55	202	45	10		
12/6 1000	2.0	53	1.1	10	1,270	7.2	7.36		119 / 5.18		0.0 / 0.00	434 / 7.11		147 / 4.15			0.3			745[e]	41	368	12	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 3

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (3)

SAN BENITO RIVER NEAR BEAR VALLEY FIRE STATION (STA. 77a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							equivalents per million																			
1961																										USGS
1/11 1240	1.5 (est.)	59	11.2	114	1,860	8.3	11.94[c]		200/8.70		25/0.83	522/8.56		135/3.81			1.6		Tot. Alk. 573	1,205[e]	42	597	117	6	Median 23.	
2/15 1525	3 (est.)	59	8.5	87	1,850	8.0	11.60[c]		200/8.70		26/0.87	469/7.69		135/3.81			1.6		Tot. Alk. 521	1,198[e]	43	580	153	10	Maximum 2,400.	
3/8 1445	2.0 (est.)	64	10.2	110	1,900	8.1	12.38[c]		200/8.70		35/1.17	476/7.80		142/4.00			1.8		Tot. Alk. 546	1,230[e]	41	619	171	3	Minimum 1.3	
4/12 1600	1.5 (est.)	64	9.5	103	2,080	8.3	12.00[c]		254/11.05		22/0.73	502/8.23		186/5.25			2.1		Tot. Alk. 547	1,350[e]	48	600	151	1		
5/3 1315	1 (est.)	83	8.5	110	2,080	8.3	50/2.50	130/10.66	248/10.79	3.6/0.09	25/0.83	486/7.97	475/9.89	176/4.96	0.4/0.01	0.5/0.03	2.0	15	Al 0.26 PO_4 0.05 [d] Tot. Alk. 537	1,370[f]	45	658	218	5		
6/7 1410	0.5 (est.)	88	8.4	115	2,070	8.4	12.00[c]		256/11.14		25/0.83	426/6.98		185/5.22			2.0		Tot. Alk. 477	1,341[e]	48	600	209	1		
7/12 1410	0.5 (est.)	89	9.8	135	2,150	8.4	12.90[c]		252/10.96		41/1.37	421/6.90		190/5.36			2.1		Tot. Alk. 504	1,390[e]	46	645	232	8		
8/7 1245	0.25 (est.)	89	10.3	142	2,160	8.4	12.46[c]		270/11.74		35/1.17	446/7.31		196/5.53			2.6		Tot. Alk. 517	1,400[e]	49	623	199	4		
9/7 1300	0.3 (est.)	83	9.1	119	2,270	8.4	39/1.95	147/12.09	282/12.27	6.8/0.17	28/0.93	536/8.79	484/10.08	212/5.98	0.6/0.01	0.4/0.02	2.3	10	Fe 0.07 Al 0.05 [d] Tot. Alk. 593	1,480[f]	46	702	216	2		
10/4 1445	0.25 (est.)	77	8.8	109	2,230	8.1	13.90[c]		265/11.53		36/1.20	542/8.88		202/5.70			1.7		Tot. Alk. 616	1,445[e]	45	695	190	5		
11/7 1345	0.25 (est.)	64	10.6	114	2,190	8.3	13.68[c]		260/11.31		30/1.00	532/8.72		202/5.70			1.9		Tot. Alk. 592	1,419[e]	45	684	199	3		
12/5 1720	123	50	10.2	93	686	8.4	5.96[c]		40/1.74		0.0/0.00	310/5.08		26/0.73			0.6			445[e]	23	298	44	70		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (3)

SAN LORENZO RIVER AT BIG TREES (STA. 75)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/10 1400	19	48	13.6	118	395	8.3	—/2.82[c]		33/1.44		0.0/0.00	143/2.34		26/0.73			0.1			240[e]	34	141	24	6	Median 6.2	
2/14 1450	46	53	11.0	102	380	7.7	—/2.68[c]		28/1.22		0.0/0.00	128/2.10		23/0.65			0.1			231[e]	31	134	29	10	Maximum 230.	
3/7 1430	29	55	11.5	109	374	7.7	—/2.69[c]		25/1.09		0.0/0.00	132/2.16		24/0.68			0.1			227[e]	29	135	27	8	Minimum 1.3	
4/11 1600	29	62	9.2	95	399	7.7	—/2.96[c]		24/1.04		0.0/0.00	143/2.34		25/0.70			0.3			242[e]	26	148	31	4		
5/2 1245	23	67	10.7	117	385	8.1	44/2.20	7.8/0.64	26/1.13	1.5/0.04	1/0.10	136/2.23	41/0.85	26/0.73	1.0/0.02	0.2/0.01	0.1	21	Fe 0.01 PO_4 0.35 [d] Al 0.02 Tot. Alk. 142	239[f]	28	142	26	6		
6/6 1415	20	75	10.9	130	385	8.3	—/2.78[c]		25/1.09		4/0.13	137/2.25		27/0.76			0.1		Tot. Alk. 145	234[e]	28	139	20	1		
7/11 1035	9.5	72	9.0	105	368	7.9	—/2.76[c]		25/1.09		0.0/0.00	140/2.29		25/0.70			0.1			224[e]	28	138	23	5		
8/4 0800	9.0	63	8.9	93	350	7.6	—/2.56[c]		23/1.00		0.0/0.00	135/2.21		27/0.76			0.0			212[e]	28	128	17	2		
9/12 0715	9.4	58	8.8	87	343	7.7	38/1.90	6.8/0.56	21/0.91	1.5/0.04	0.0/0.00	132/2.16	30/0.62	24/0.68	0.5/0.01	0.2/0.01	0.0	32	Fe 0.26 PO_4 0.60 Zn 0.03	219[f]	27	123	15	4		
10/5 1215	11.0	62	10.2	105	347	8.0	—/2.50[c]		22/0.96		0.0/0.00	134/2.20		24/0.68			0.1			211[e]	28	125	18	5		
11/8 1055	11.0	47	11.3	96	393	7.6	—/2.80[c]		26/1.13		2/0.07	139/2.28		34/0.96			0.0		Tot. Alk. 143	239[e]	29	140	23	3		
12/6 1345	28	50	10.1	90	433	7.2	—/3.18[c]		26/1.13		0.0/0.00	125/2.05		31/0.87			0.1			263[e]	26	159	57	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 3
ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (3)

SOQUEL CREEK AT SOQUEL (STA. 76)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[a]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/10 1500	4.8	55	13.8	130	894	8.3	6.36[c]		58 / 2.52		9 / 0.30	246 / 4.03		82 / 2.31			0.1		Tot. Alk. 264	564[e]	28	318	102	6	Median 23.	
2/14 1600	9.8	60	9.9	99	797	7.7	5.81[c]		58 / 2.52		8 / 0.27	222 / 3.64		62 / 1.75			0.1		Tot. Alk. 238	502[e]	30	290	95	7	Maximum 500.	
3/7 1550	7.0	58	11.7	114	820	8.1	5.94[c]		57 / 2.48		9 / 0.30	223 / 3.65		70 / 1.97			0.2		Tot. Alk. 241	518[e]	29	297	99	5	Minimum 0.62	
4/11 1710	2.9	66	9.8	104	785	8.3	5.82[c]		55 / 2.39		9 / 0.30	226 / 3.70		63 / 1.78			0.5		Tot. Alk. 244	495[e]	29	291	91	0.9		
5/2 1335	4.7	71	11.2	126	781	8.3	79 / 3.94	24 / 1.94	58 / 2.52	3.9 / 0.10	13 / 0.43	225 / 3.69	111 / 2.31	68 / 1.92	0.6 / 0.01	0.3 / 0.02	0.2	29	Fe 0.01 Cu 0.01[d] Al 0.09 PO_4 0.25 Tot. Alk. 251	498[f]	30	294	88	2		
6/6 1500	4.8	78	9.7	117	768	8.4	5.59[c]		54 / 2.35		13 / 0.43	208 / 3.41		73 / 2.06			0.1		Tot. Alk. 234	484[e]	30	279	87	2		
7/11 1155	2.0	74	12.0	139	713	8.3	5.73[c]		42 / 1.83		11 / 0.37	222 / 3.64		53 / 1.49			0.3		Tot. Alk. 244	450[e]	24	286	86	5		
8/4 0655	1.4	64	6.3	67	706	7.5	5.60[c]		42 / 1.83		0.0 / 0.00	238 / 3.90		53 / 1.49			0.1			446[e]	25	280	85	4		
9/8 0750	1.8	62	7.4	75	707	7.8	71 / 3.54	24 / 1.98	43 / 1.87	4.7 / 0.12	0.0 / 0.00	244 / 4.00	85 / 1.77	51 / 1.44	0.2 / 0.00	0.3 / 0.02	0.0	36	Fe 0.08 PO_4 0.25[d] Cu 0.01 Zn 0.01 As 0.01	435[f]	26	276	78	3		
10/5 1015	1.2	60	9.9	99	723	7.9	5.76[c]		42 / 1.83		0.0 / 0.00	255 / 4.18		65 / 1.83			0.1			456[e]	24	288	79	7		
11/8 1000	1.3	50	10.7	94	736	7.9	6.02[c]		42 / 1.83		10 / 0.33	240 / 3.93		61 / 1.72			0.1		Tot. Alk. 260	464[e]	23	301	88	2		
12/6 1235	6.0	50	11.0	98	1,000	8.0	7.40[c]		72 / 3.13		0.0 / 0.00	237 / 3.88		106 / 2.99			0.2			631[e]	30	370	176	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

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ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (3)

UVAS CREEK NEAR MORGAN HILL (STA. 96)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[a]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/11 1410	2 (est.)	50	13.2	118	372	8.1	3.48[c]		12 / 0.52		0.0 / 0.00	183 / 3.00		7.0 / 0.20			0.1			230[e]	13	174	24	8	Median 2.3	
2/15 1235	3 (est.)	53	11.1	103	380	7.5	3.64[c]		12 / 0.52		0.0 / 0.00	186 / 3.05		10 / 0.28			0.1			235[e]	12	182	29	2	Maximum 62.	
3/8 1205	3.0 (est.)	54	11.8	111	398	7.7	3.69[c]		12 / 0.52		0.0 / 0.00	194 / 3.18		8.5 / 0.24		0.2	0.2			245[e]	12	184	25	14	Minimum 0.13	
4/12 1330	2.8 (est.)	58	10.5	103	402	7.9	3.89[c]		13 / 0.57		0.0 / 0.00	202 / 3.31		9.7 / 0.27			0.1			248[e]	13	194	28	7		
5/3 1100	3.7 (est.)	64	11.0	117	400	7.9	45 / 2.25	21 / 1.71	14 / 0.61	1.2 / 0.03	8 / 0.27	184 / 3.02	40 / 0.83	10 / 0.28	0.1 / 0.00	0.3 / 0.02	0.1	14	Zn 0.01 [d] Tot. Alk. 200	245[f]	13	198	34	14		
6/7 1230	0.5 (est.)	75	9.7	115	433	7.9	4.30[c]		14 / 0.61		10 / 0.33	207 / 3.39		8.6 / 0.24			0.1		Tot. Alk. 227	267[e]	12	215	29	2		
7/12 0945	1.5 (est.)	69	7.2	81	466	7.6	4.54[c]		16 / 0.70		6 / 0.20	239 / 3.92		10 / 0.28			0.1		Tot. Alk. 251	287[e]	13	227	21	3		
8/7 1015	Ponded - No Sample																									
9/7 1010	Dry																									
10/4 1230	Dry																									
11/7 1045	Dry																									
12/5 1440	Dry																									

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER AT FAIR OAKS (STA. 22d)

Date and time sampled P.S.T.	Discharge in cfs Daily Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total[f] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/1-9	2,660				67.6	6.6	8.0 / 0.40	1.5 / 0.12	2.6 / 0.11		0 / 0.00	28 / 0.46								56	17	26	3			
1/10-20	2,660				67.0	6.7	8.0 / 0.40	1.5 / 0.12	2.9 / 0.13		0 / 0.00	28 / 0.46								62	20	26	3			
1/21-31	1,620				68.2	6.7	8.0 / 0.40	1.5 / 0.12	2.9 / 0.13		0 / 0.00	28 / 0.46								50	20	26	3			
2/1-10	1,220				73	7.4	7.4 / 0.37	2.9 / 0.24	2.8 / 0.12		0 / 0.00	35 / 0.57								53	16	30	1			
2/11-20	1,030				75	7.4	7.8 / 0.39	2.1 / 0.17	4.6 / 0.20		0 / 0.00	35 / 0.57								55	26	28	0			
2/21-28	790				79	7.1	7.7 / 0.38	3.2 / 0.26	3.3 / 0.14		0 / 0.00	35 / 0.57								50	18	32	3			
3/1-10	567				77	7.1	8.8 / 0.44	2.4 / 0.20	3.3 / 0.14		0 / 0.00	33 / 0.54								55	18	32	5			
3/11-20	666				77	7.1	8.8 / 0.44	2.4 / 0.20	3.3 / 0.14		0 / 0.00	32 / 0.52								54	18	32	6			
3/21-31	885				78	6.9	8.8 / 0.44	2.4 / 0.20	3.2 / 0.14		0 / 0.00	32 / 0.52								52	18	32	6			
4/1-10	1,090				78	6.7	8.8 / 0.44	2.2 / 0.18	3.1 / 0.13		0 / 0.00	32 / 0.52								54	17	31	5			
4/11-20	1,080				78	6.9	8.8 / 0.44	2.4 / 0.20	3.6 / 0.16		0 / 0.00	32 / 0.52								54	20	32	6			
4/21-30	1,150				77	7.1	8.8 / 0.44	2.2 / 0.18	3.1 / 0.13		0 / 0.00	31 / 0.51								62	17	31	6			
5/1-10	1,040				76	6.9	8.0 / 0.40	3.4 / 0.28	2.1 / 0.09		0 / 0.00	32 / 0.52								54	12	34	8			
5/11-20	1,030				75	6.7	8.0 / 0.40	3.9 / 0.32	1.7 / 0.07		0 / 0.00	30 / 0.49								54	9	36	11			
5/21-31	1,020				73	6.8	8.0 / 0.40	2.9 / 0.24	2.0 / 0.09		0 / 0.00	32 / 0.52								52	12	32	6			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

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ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER AT FAIR OAKS (STA. 22d CONTINUED)

Date and time sampled P.S.T.	Discharge in cfs Daily Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[g]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
6/1-30	2,080				68	7.4	7.2 / 0.36	2.4 / 0.20	2.7 / 0.12		0 / 0.00	28 / 0.46								53	18	28	5			
7/1-31	3,840				59	6.8	6.4 / 0.32	1.9 / 0.16	2.4 / 0.10		0 / 0.00	26 / 0.43								57	17	24	3			
8/1-31	3,200				56	7.2	5.6 / 0.28	2.4 / 0.20	2.1 / 0.09		0 / 0.00	26 / 0.43								48	16	24	3			
9/1-30	1,070				62	7.3	6.4 / 0.32	2.4 / 0.20	2.9 / 0.13		0 / 0.00	29 / 0.48								50	20	26	2			
10/1-31	610				68	7.5	7.2 / 0.36	2.9 / 0.24	2.6 / 0.11		0 / 0.00	30 / 0.49								48	17	30	5			
11/1-30	511				72	7.2	7.2 / 0.36	3.4 / 0.28	2.7 / 0.12		0 / 0.00	32 / 0.52								52	16	32	6			
12/1-31	495				76	7.0	8.0 / 0.40	2.4 / 0.20	2.8 / 0.12		0 / 0.00	34 / 0.56								62	17	30	2			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER AT FAIR OAKS (STA. 22d) (continued)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million													Total[g] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
														equivalents per million												
			ppm	%Sat			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents			Total ppm	N.C. ppm			
4/4 1430		57			70	7.5	6.4	3.7	2.1	0.0	0.0	29	5.3	4.3	0.6					58	13					USBR
7/6 1400		60			61	7.4	9.2	0.6	2.1	0.8	0.0	28	4.8	5.0	0.0					54	15					USBR
10/5 1330		70			60	7.5	4.6	3.8	2.1	1.6	0.0	23	5.8	4.3	3.7					80	13					USBR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER, MIDDLE FORK NEAR AUBURN (STA. 22b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961 1/3 1120	134	36	12.7	92	745	7.1 / 7.6	/ 0.58[c]		2.5 / 0.11		0 / 0.00	34 / 0.56		2.5 / 0.07			0.0 /			57[e]	16	29	1	3	Median 1.3	USGS
2/10 0830	4,120	48	11.7	100	52.4	7.2 / 7.3	/ 0.42[c]		2.4 / 0.10		0 / 0.00	22 / 0.36		1.5 / 0.04			0.0 /			40[e]	19	21	3	200	Maximum 230.	
3/3 1110	554	49	11.3	98	54	7.1 / 7.7	/ 0.43[c]		3.4 / 0.15		0 / 0.00	24 / 0.39		3.4 / 0.10			0.0 /			41[e]	26	22	2	2	Minimum 0.06	
4/5 1150	3,010	53	10.7	98	28	7.1 / 7.1	/ 0.24[c]		0.6 / 0.03		0 / 0.00	13 / 0.21		1.8 / 0.05			0.0 /			21[e]	11	12	1	4		
5/1 0740	1,960	53	10.7	98	31	7.2 / 7.4	3.4 / 0.17	0.9 / 0.07	1.7 / 0.07	0.5 / 0.01	0 / 0.00	15 / 0.25	0.0 / 0.00	1.6 / 0.05	0.0 / 0.00	0.0 / 0.00	0.0 /	8.9 /	Fe 0.02 Al 0.03[d] Cu 0.02 PO_4 0.00 ABS 0.0	24[f]	22	12	0	4		
6/12 1500	889	66	8.9	95	32	7.3 / 7.3	/ 0.26[c]		1.3 / 0.06		0 / 0.00	17 / 0.28		0.6 / 0.02			0.0 /			24[e]	19	13	0	4		
7/5 1500	204	73	8.3	95	57	7.3 / 7.6	/ 0.48[c]		2.0 / 0.09		0 / 0.00	28 / 0.46		2.4 / 0.07			0.0 /			44[e]	16	24	1	2		
8/14 1035	53	est. 70	8.5	95	83	7.4 / 7.8	/ 0.69[g]		2.2 / 0.10		0 / 0.00	45 / 0.74		3.7 / 0.10			0.0 /			63[e]	13	34	0	1		
9/12 1000	38	72	8.4	95	94	7.4 / 7.7	11 / 0.55	2.3 / 0.19	3.3 / 0.14	0.9 / 0.02	0 / 0.00	39 / 0.64	4.0 / 0.08	7.0 / 0.20	0.1 / 0.00	0.1 / 0.01	0.0 /	13 /	Zn 0.04 PO_4 0.05[d] ABS 0.0	61[f]	16	37	5	3		
10/10 0945	37	62	9.5	97	98	7.4 / 7.8	/ 0.74[c]		3.6 / 0.16		0 / 0.00	39 / 0.64		7.0 / 0.20			0.1 /			75[e]	18	37	5	6		
11/2 1000	89	51	10.6	95	85	7.4 / 7.7	/ 0.68[c]		3.2 / 0.14		0 / 0.00	32 / 0.52		7.8 / 0.22			0.0 /			65[e]	17	34	8	1		
12/5 1045	204	46	12.0	100	68	7.0 / 7.3	/ 0.58[c]		2.4 / 0.10		0 / 0.00	29 / 0.48		3.6 / 0.10			0.0 /			52[e]	15	29	5	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER AT NIMBUS DAM (STA. 22a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
1961																									Median 62. Maximum > 7000. Minimum < 0.45	USGS
1/6 1255	2,640	49	10.6	92	64.3	7.0 / 7.5	—/0.54[c]		2.3/0.10		0/0.00	32/0.52		1.8/0.05			0.0			43[e]	16	27	1	3		
2/9 1530	1,100	51	11.2	100	92.0	7.1 / 7.8	—/0.79[c]		3.1/0.13		0/0.00	42/0.69		5.5/0.16			0.0			61[e]	14	40	6	5		
3/13 0830	660	53	11.3	105	76	7.3 / 7.6	—/0.62[c]		2.2/0.10		0/0.00	33/0.54		0.7/0.02			0.1			51[e]	14	31	4	6		
4/7 0755	955	55	11.1	104	76	7.2 / 7.7	—/0.64[c]		1.3/0.06		0/0.00	33/0.54		3.8/0.11			0.0			51[e]	9	32	5	2		
5/3 0930	1,030	58	10.6	103	76	7.3 / 7.5	8.1/0.40	2.6/0.21	2.7/0.12	3.3/0.08	0/0.00	34/0.56	4.0/0.08	4.2/0.12	0.2/0.00	0.0/0.00	0.0	9.1	Fe 0.01 Cu 0.02[d] PO_4 0.00 ABS 0.0	51[f]	15	31	3	4		
6/2 0710	1,440	59	10.0	98	73	7.2 / 7.7	—/0.59[c]		2.7/0.12		0/0.00	31/0.51		3.5/0.10			0.0			49[e]	17	30	5	3		
7/5 1100	4,120	60	9.9	99	59	7.2 / 7.7	—/0.48[c]		2.0/0.09		0/0.00	29/0.48		1.6/0.05			0.0			39[e]	16	24	0	3		
8/7 1400	3,770	64	8.5	89	52	7.1 / 7.5	—/0.40[c]		1.8/0.08		0/0.00	23/0.38		3.8/0.11			0.1			35[e]	17	20	1	4		
9/11 1100	955	71	9.0	101	71	7.2 / 7.5	8.0/0.40	1.9/0.16	2.7/0.12	0.7/0.02	0/0.00	30/0.49	2.0/0.04	6.0/0.17	0.1/0.00	0.1/0.01	0.0	12	PO_4 0.05 Zn 0.07[d] ABS 0.0	48[f]	17	28	3	5		
10/9 1045	601	68	9.0	98	66	7.4 / 7.1	—/0.50[c]		2.7/0.12		0/0.00	30/0.49		2.8/0.08			0.2			44[e]	19	25	0	3		
11/9 1100	503	60	10.2	102	77	7.6 / 7.3	—/0.62[c]		2.2/0.10		0/0.00	32/0.52		4.8/0.14			0.0			51[e]	14	31	5	4		
12/5 1530	489	53	10.7	98	76	7.0 / 7.2	—/0.67[c]		2.3/0.10		0/0.00	37/0.61		4.0/0.11			0.1			51[e]	13	34	4	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER AT SACRAMENTO (STA. 22)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961	Not Rated																								Median 18.	USGS
1/6 1330		48	11.1	96	64.3	7.0/7.5	—/0.52[g]		2.0/0.09		0/0.00	32/0.52		1.2/0.03			0.0			46[e]	15	26	0	3	Maximum > 7000.	
2/9 1700		52	11.2	101	71.4	7.1/7.7	—/0.58[g]		3.0/0.13		0/0.00	35/0.57		2.4/0.07			0.0			51[e]	18	29	0	6	Minimum < 0.45	
3/5 1400		54	10.9	101	81	7.3/7.7	—/0.66[g]		3.4/0.15		0/0.00	34/0.56		5.2/0.15			0.0			58[e]	19	33	5	1		
4/6 1705		61	10.3	104	78	7.2/7.7	—/0.67[g]		1.6/0.07		0/0.00	35/0.57		3.8/0.11			0.0			56[e]	9	34	5	2		
5/5 0930		60	9.8	98	76	7.3/7.6	8.4/0.42	2.3/0.19	3.3/0.14	1.0/0.03	0/0.00	33/0.54	4.0/0.08	3.8/0.11	0.2/0.00	0.0/0.00	0.0	8.5	Cu 0.01 PO_4 0.05[d] ABS 0.0	48[f]	18	31	4	4		
6/2 0815		60	9.5	95	70	7.3/7.4	—/0.56[g]		2.7/0.12		0/0.00	29/0.48		3.0/0.08			0.0			50[e]	18	28	4	6		
7/5 0945		58	8.5	83	61	7.1/7.5	—/0.50[g]		2.1/0.09		0/0.00	27/0.44		2.5/0.07			0.0			43[e]	15	25	3	0		
8/7 1245		66	8.6	92	54	7.2/7.5	—/0.40[g]		1.9/0.08		0/0.00	24/0.39		4.0/0.11			0.1			38[e]	17	20	0	3		
9/11 0850		72	8.2	93	59	7.2/7.4	6.8/0.34	1.7/0.14	1.9/0.08	0.7/0.02	0/0.00	26/0.43	2.0/0.04	4.0/0.11	0.4/0.01	0.1/0.01	0.0	12	Cu 0.01 Zn 0.04[d] PO_4 0.25 ABS 0.0	43[f]	14	24	3	5		
10/9 0930		62	9.2	94	68	7.4/7.5	—/0.52[g]		2.7/0.12		0/0.00	32/0.52		2.0/0.06			0.0			48[e]	19	26	0	9		
11/9 0930		57	9.4	90	73	7.7/7.4	—/0.58[g]		2.6/0.11		0/0.00	32/0.52		3.0/0.08			0.0			52[e]	16	29	3	4		
12/4 1555		54	11.0	102	73	7.1/7.3	—/0.59[g]		2.8/0.12		0/0.00	36/0.59		3.4/0.10			0.0			52[e]	17	30	0	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

AMERICAN RIVER, SOUTH FORK NEAR LOTUS (STA. 22c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 2.3	USGS
1/3 0950	106	36	12.1	88	80.2	7.1/7.5	—/0.68[c]		3.4/0.15		0/0.00	52/0.85		2.8/0.08			0.0			64[e]	18	34	0	3	Maximum	
2/10 1015	577	49	11.3	99	92.9	7.2/7.6	—/0.78[c]		3.6/0.16		0/0.00	38/0.62		3.2/0.09			0.0			74[e]	17	39	8	10	620.	
3/3 0950	317	47	11.5	98	64	7.3/7.6	—/0.50[c]		3.4/0.15		0/0.00	28/0.46		4.5/0.13			0.0			51[e]	23	25	2	2	Minimum 0.23	
4/5 1030	1,560	54	10.3	95	34	7.2/7.2	—/0.28[c]		0.9/0.04		0/0.00	16/0.26		2.1/0.06			0.0			27[e]	12	14	1	10		
5/3 0815	385	52	10.3	93	34	7.1/7.2	4.4/0.22	0.0/0.00	1.6/0.07	0.3/0.01	0/0.00	17/0.28	0.0/0.00	1.6/0.05	1.0/0.02	0.0/0.00	0.1	9.5	Fe 0.04 Al 0.09[d] Cu 0.01 PO_4 0.20 ABS 0.0	27[f]	23	11	0	25		
6/12 1630	440	68	8.5	93	35	7.3/7.8	—/0.27[c]		1.8/0.08		0/0.00	19/0.31		0.8/0.02			0.0			28[e]	23	13	0	9		
7/5 1330	394	69	8.4	92	50	7.3/7.5	—/0.38[c]		2.5/0.11		0/0.00	24/0.39		2.6/0.07			0.0			40[e]	22	19	0	3		
8/14 1315	138	est. 69	8.2	90	41	7.6/7.3	—/0.28[c]		3.1/0.13		0/0.00	22/0.36		1.6/0.05			0.0			32[e]	32	14	0	6		
9/12 1240	160	69	8.7	96	49	7.2/7.6	5.2/0.26	1.0/0.08	2.1/0.09	0.6/0.02	0/0.00	20/0.33	0.0/0.00	5.0/0.14	0.0/0.00	0.0/0.00	0.0	8.1	Cu 0.10 PO_4 0.00[d] ABS 0.0	32[f]	20	17	1	2		
10/10 1140	114	56	10.2	97	54	7.4/7.5	—/0.40[c]		2.1/0.09		0/0.00	25/0.41		3.2/0.09			0.1			43[e]	18	20	0	7		
11/2 1450	180	49	11.5	101	61	7.4/7.6	—/0.46[c]		2.2/0.10		0/0.00	26/0.43		4.5/0.13			0.0			48[e]	18	23	2	8		
12/5 1320	328	45	12.2	101	68	7.0/7.3	—/0.58[c]		2.4/0.10		0/0.00	28/0.46		3.8/0.11			0.0			54[e]	15	29	6	15		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

ANTELOPE CREEK NEAR MOUTH (STA. 88c)

Date and time sampled P.S.T.	Discharge in cfs (Est. by Sampler)	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/3 1215		41	12.0	94	232	7.1 / 7.7	1.72[c]		14 / 0.61		0.0 / 0.00	104 / 1.70		14 / 0.39			0.3			171[e]	26	86	1	4		
2/16 1030		48	11.7	101		7.3	Broken in transit																			
3/15 0835		50	10.3	91	75	7.3 / 7.7	0.60[c]		3.1 / 0.13		0.0 / 0.00	44 / 0.72		0.5 / 0.01			0.0			55[e]	16	33	0	28		
4/11 1215	10	64	10.3	107	174	7.3 / 7.7	1.30[c]		10 / 0.44		0.0 / 0.00	75 / 1.23		8.0 / 0.23			0.2			128[e]	25	65	3	15		
5/2 1300	45	60	9.7	97	152	7.2 / 8.0	11 / 0.55	3.5 / 0.29	11 / 0.48	3.7 / 0.07	0.0 / 0.00	52 / 0.85	13 / 0.27	11 / 0.31	0.0 / 0.00	0.2 / 0.01	0.3	31	Al 0.04 As 0.02 d PO_4 0.05 ABS 0.0	110[f]	35	42	0	30		
6/6 1310	15	75	8.1	94	176	7.3 / 8.1	1.26[c]		10 / 0.44		0.0 / 0.00	72 / 1.18		9.7 / 0.27			0.2			129[e]	26	63	4	2		
7/6 1120		70	8.0	89	194	7.3 / 7.3	1.26[c]		13 / 0.57		0.0 / 0.00	68 / 1.11		11 / 0.31			0.3			143[e]	31	63	7	11		
8/8 1300	5	82	9.5	119	289	7.7 / 7.8	2.20[c]		16 / 0.70		0.0 / 0.00	133 / 2.18		18 / 0.51			0.4			212[e]	24	110	1	12		
9/14 1210	12	69	8.3	91	240	7.5 / 8.0	16 / 0.80	9.0 / 0.74	19 / 0.83	4.0 / 0.10	0.0 / 0.00	96 / 1.57	14 / 0.29	19 / 0.54	0.8 / 0.01	0.1 / 0.01	0.6	43	Fe 0.34 As 0.02 d Al 0.01 PO_4 0.40 ABS 0.0	173[f]	34	77	0	35		
10/2 1000	8	62	6.3	64	232	7.3 / 7.6	1.38[c]		20 / 0.87		0.0 / 0.00	87 / 1.43		20 / 0.56			0.6			171[e]	39	69	0	7		
11/9 1500	15	50	10.8	96	216	7.6 / 8.0	1.26[c]		18 / 0.78		0.0 / 0.00	78 / 1.28		21 / 0.59			0.6			159[e]	38	63	0	6		
12/8 1020	15	44	10.6	86	190	7.1 / 7.8	1.54[c]		9.7 / 0.42		0.0 / 0.00	89 / 1.46		9.0 / 0.25			0.2			140[e]	21	77	4	20		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

ANTELOPE CREEK NEAR RED BLUFF (STA. 88e)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/3 1245	45	37	13.5	99	156	7.5 / 7.9	— / 1.18[c]		10 / 0.44		0.0 / 0.00	85 / 1.39		7.5 / 0.21			0.2			125[e]	27	59	0	4		USGS
2/16 0943	302	48	11.5	99	84.1	7.4 / 7.9	— / 0.72[c]		3.8 / 0.17		0.0 / 0.00	47 / 0.77		1.5 / 0.04			0.1			68[e]	19	36	0	4		
3/15 0745	500	49	11.1	97	75	7.5 / 7.6	— / 0.66[c]		3.1 / 0.13		0.0 / 0.00	45 / 0.74		0.8 / 0.02			0.1			60[e]	16	33	0	19		
4/11 1040	98	57	10.5	101	101	7.5 / 8.1	— / 0.84[c]		6.4 / 0.28		0.0 / 0.00	56 / 0.92		4.9 / 0.14			0.1			81[e]	25	42	0	1		
5/2 1210	91	58	10.5	102	107	7.9 / 7.9	9.2 / 0.46	4.1 / 0.34	7.6 / 0.33	1.0 / 0.03	0.0 / 0.00	58 / 0.95	0.0 / 0.00	5.5 / 0.16	0.0 / 0.00	0.1 / 0.01	0.0	29	PO_4 0.00 ABS 0.1 [d]	86[f]	28	40	0	1		
6/6 1215	95	68	8.1	88	121	7.8 / 8.1	— / 0.85[c]		8.3 / 0.36		0.0 / 0.00	62 / 1.02		9.2 / 0.26			0.1			97[e]	30	43	0	1		
7/7 1224	33	75	8.7	101	156	7.7 / 8.1	— / 1.10[c]		11 / 0.48		0.0 / 0.00	81 / 1.33		8.5 / 0.24			0.1			125[e]	30	55	0	3		
8/8 1340	29	82	8.3	104	163	8.1 / 8.4	— / 1.14[c]		13 / 0.57		2 / 0.07	82 / 1.34		10 / 0.28			0.2		Tot. Alk. 86	131[e]	33	57	0	6		
9/14 1130	28	68	9.9	108	169	8.1 / 8.3	13 / 0.65	6.7 / 0.55	11 / 0.48	1.4 / 0.04	1 / 0.03	86 / 1.41	0.0 / 0.00	11 / 0.31	0.2 / 0.00	0.1 / 0.01	0.1	41	Tot. Alk. 88 Cu 0.01 Fe 0.04 PO_4 0.05 ABS 0.0 [d]	128[f]	28	60	0	3		
10/2 1050	30	65	9.6	101	170	7.5 / 8.1	— / 1.20[c]		12 / 0.52		0.0 / 0.00	88 / 1.44		8.0 / 0.23			0.1			137[e]	30	60	0	10		
11/9 1430	32	50	10.9	96	167	8.0 / 8.0	— / 1.22[c]		12 / 0.52		0.0 / 0.00	90 / 1.48		8.6 / 0.24			0.2			134[e]	30	61	0	3		
12/8 0955	62	42	12.1	96	151	7.4 / 8.0	— / 1.14[c]		9.2 / 0.40		0.0 / 0.00	78 / 1.28		7.2 / 0.20			0.1			121[e]	26	57	0	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

BATTLE CREEK NEAR COTTONWOOD (STA. 88b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/3 0915	233	43	11.6	94	144	7.5/7.9	—/1.16[c]		8.5/0.37		0.0/0.00	86/1.41		2.0/0.06			0.1			125[e]	24	58	0	5		
2/15 1525	1,320	52	10.8	98	95	7.4/7.9	—/0.76[c]		4.2/0.18		0.0/0.00	51/0.84		1.2/0.03			0.0			83[e]	19	38	0	20		
3/14 1205	271	55	11.4	108	127	7.7/8.1	—/1.02[c]		7.5/0.33		0.0/0.00	77/1.26		1.5/0.04			0.1			111[e]	24	51	0	3		
4/11 0745	409	53	10.4	95	118	7.4/7.9	—/0.94[c]		6.6/0.29		0.0/0.00	65/1.07		1.0/0.03			0.1			103[e]	24	47	0	1		
5/2 0800	379	52	10.2	93	113	7.1/8.0	9.2/0.46	4.9/0.40	7.9/0.34	1.8/0.05	0.0/0.00	67/1.10	1.0/0.02	2.5/0.07	0.1/0.00	0.2/0.01	0.0	40	Zn 0.03 PO_4 0.00 d ABS 0.1	101[f]	27	43	0	5		
6/6 0845	367	58	8.4	82	109	7.3/8.1	—/0.85[c]		6.0/0.26		0.0/0.00	62/1.02		2.5/0.07			0.0			95[e]	23	43	0	1		
7/6 1522	233	65	10.1	106	135	7.9/8.1	—/1.04[c]		7.9/0.34		0.0/0.00	78/1.28		2.0/0.06			0.0			118[e]	25	52	0	4		
8/8 0925	180	65	9.5	100	145	7.7/8.1	—/1.12[c]		8.5/0.37		0.0/0.00	86/1.41		3.5/0.10			0.1			126[e]	25	56	0	3		
9/7 1425	200	63	10.3	106	153	8.1/8.3	10/0.50	7.5/0.62	8.4/0.37	2.2/0.06	1/0.03	88/1.44	1.0/0.02	2.5/0.07	0.1/0.00	0.1/0.01	0.1	47	Fe 0.09 ABS 0.0 d PO_4 0.15 As 0.02 Tot. Alk. 90	123[f]	24	56	0	3		
10/5 1300	217	65	10.4	109	148	8.1/8.4	—/1.18[c]		8.4/0.37		1/0.03	86/1.41		1.2/0.03			0.0		Tot. Alk. 88	129[e]	24	59	0	10		
11/9 1120	225	51	11.8	100	153	7.7/8.1	—/1.16[c]		8.7/0.38		0.0/0.00	90/1.48		2.4/0.07			0.1			133[e]	25	58	0	5		
12/7 1415	305	46	11.2	94	142	7.5/7.9	—/1.14[c]		7.7/0.33		0.0/0.00	83/1.36		1.5/0.04			0.1			124[e]	22	57	0	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

BEAR CREEK AT MERCED (STA. 111a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1961																										USGS
1/3 1530		40	15.1	116	306	8.3	—/2.94[c]		14/0.61		6/0.20	166/2.72		6.0/0.17			0.0		Total Alkalinity 178	196	17	147	1	1		
2/6 1600		58	10.8	105	384	8.2	—/3.60[c]		15/0.65		0.0/0.00	209/3.43		6.5/0.18			0.0			246	15	180	9	5		
3/3 1200		57	11.6	111	336	8.3	—/2.94[c]		25/1.09		2/0.07	170/2.79		8.5/0.24			0.1		Total Alkalinity 174	215	27	147	4	10		
4/3 1740		80	8.0	98	289	8.2	—/2.46[c]		14/0.61		0.0/0.00	147/2.41		7.5/0.21			0.0			185	20	123	2	15		
5/10 1355		70	8.5	95	85	7.4	6.4/0.32	4.9/0.40	3.3/0.14	0.9/0.02	0.0/0.00	41/0.67	4.0/0.08	2.8/0.08	0.2/0.00	0.1/0.01	0.1	13	Al 0.04, PO_4 0.05, ABS 0.0	56	16	36	2	25		
6/5		75	7.5	88	85	7.3	—/0.74[c]		4.0/0.17		0.0/0.00	48/0.79		1.2/0.03			0.0			56	19	37	0	15		
7/12 0830		82	7.6	96	179	8.2	—/1.46[c]		8.8/0.38		0.0/0.00	97/1.59		3.5/0.10			0.0			115	21	73	0	29		
8/4 1012		78	9.6	116	233	7.3	—/1.85[c]		13/0.57		0.0/0.00	124/2.03		4.4/0.12			0.0			149	24	92	0	10		
9/8 0740		73	6.7	77	208	8.0	18/0.90	7.5/0.62	14/0.61	1.4/0.04	0.0/0.00	109/1.79	8.0/0.17	8.5/0.24	1.3/0.02	0.1/0.01	0.0	31	PO_4 0.15, ABS 0.0	144	28	76	0	35		
10	DRY																									
11	DRY																									
12	DRY																									

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

BEAR RIVER NEAR MOUTH (STA.20b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										
1/4 1000		39	12.4	94	136	7.1 / 7.6	1.18[c]		4.5 / 0.20		0 / 0.00	63 / 1.03		3.5 / 0.10			0.0			87[e]	14	59	7	20		USGS
2/9 1550		55	9.2	86	185	7.3 / 7.9	1.50[c]		7.0 / 0.30		0 / 0.00	74 / 1.21		3.0 / 0.08			0.0			119[e]	17	75	14	45		
3/10 1330		60	10.1	101	252	7.6 / 8.0	2.09[c]		9.6 / 0.42		0 / 0.00	107 / 1.75		10 / 0.28			0.0			162[e]	17	104	16	10		
4/5 1700		65	9.9	104	147	7.7 / 8.0	1.32[c]		2.8 / 0.12		0 / 0.00	66 / 1.08		4.8 / 0.14			0.0			94[e]	8	66	12	4		
5/4 1130		65	9.4	99	401	8.1 / 8.0	28 / 1.40	16 / 1.28	30 / 1.30	6.5 / 0.17	0.0 / 0.00	139 / 2.28	24 / 0.50	43 / 1.21	0.3 / 0.00	0.4 / 0.02	0.1	35	Fe 0.13 Al 0.26[d] Cu 0.02 PO_4 0.35 ABS 0.0	251[f]	31	134	20	5		
6/		Not Sampled - Dry																								
7/		Not Sampled - Dry																								
8/		Not Sampled - Dry																								
9/		Not Sampled - Dry																								
10/		Not Sampled - Dry																								
11/		Not Sampled - Dry																								
12/12 1115		41	12.0	94	267	7.5 / 7.9	2.16[c]		11 / 0.48		0 / 0.00	94 / 1.54		14 / 0.39			0.0			172[e]	18	108	31	7		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

BEAR RIVER NEAR WHEATLAND (STA. 78)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 2.3	USGS
1/3 1530	128	42	11.4	90	128	7.7 / 7.9	1.16[g]		3.5 / 0.15		0 / 0.00	50 / 0.82		3.0 / 0.08			0.0			81[e]	11	58	17	13	Maximum 230.	
2/9 1649	385	54	10.5	97	176	7.5 / 7.8	1.52[g]		6.2 / 0.27		0 / 0.00	68 / 1.11		5.0 / 0.14			0.0			112[e]	15	76	20	30	Minimum 0.23	
3/10 1240	7.6	62	10.8	110	278	7.9 / 8.1	2.57[g]		7.2 / 0.31		0 / 0.00	116 / 1.90		9.0 / 0.25			0.0			176[e]	11	128	33	6		
4/5 1550	105	71	9.1	102	123	7.8 / 7.9	1.10[g]		1.7 / 0.07		0 / 0.00	55 / 0.90		4.0 / 0.11			0.0			78[e]	6	55	10	3		
5/4 1045	14	67	9.4	101	206	7.7 / 8.0	21 / 1.05	8.9 / 0.73	6.8 / 0.30	1.8 / 0.05	0 / 0.00	90 / 1.48	21 / 0.44	5.5 / 0.16	0.3 / 0.00	0.1 / 0.01	0.0	16	Al 0.05 / ABS 0.0 PO4 0.05[d]	125[f]	14	89	15	5		
6/13 1300	6.0	82	8.0	101	265	8.0 / 8.2	2.68[g]		6.6 / 0.29		0 / 0.00	128 / 2.10		8.8 / 0.25			0.0			168[e]	10	134	29	1		
7/		Not Sampled																								
8/		Not Sampled																								
9/11 1500	7.0	85	9.3	120	280	7.6 / 8.4	27 / 1.35	15 / 1.25	5.8 / 0.25	0.7 / 0.02	3 / 0.10	119 / 1.95	24 / 0.50	13 / 0.37	0.0 / 0.00	0.0 / 0.00	0.0	19	PO4 0.00 ABS 0.0[d]	166[f]	9	130	28	3		
10/4 1330	3.8	79	9.9	120	267	7.6 / 8.3	2.56[g]		5.4 / 0.23		3 / 0.10	115 / 1.88		11 / 0.31			0.0			169[e]	8	128	29	4		
11/14 0745	3.6	46	10.2	86	301	7.5 / 8.3	2.86[g]		7.4 / 0.32		1 / 0.03	139 / 2.28		10 / 0.28			0.0			191[e]	10	143	27	2		
12/12 1215	27	46	12.4	104	264	7.6 / 8.0	2.34[g]		7.2 / 0.31		0 / 0.00	99 / 1.62		11 / 0.31			0.0			167[e]	12	117	36	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

BIG CHICO CREEK AT CHICO (STA. 85a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										
1/2 1240	24	39	13.6	103	182	7.5 / 7.9	1.41[c]		11 / 0.48		0.0 / 0.00	100 / 1.64		8.0 / 0.23			0.1			137[e]	25	70	0	13		USGS
2/14 1700	70	52	10.9	99	98.9	7.4 / 8.0	0.80[c]		4.1 / 0.18		0.0 / 0.00	49 / 0.80		2.8 / 0.08			0.1			74[e]	18	40	0	3		
3/3 0730	53.5	48	10.9	94	152	7.4 / 7.9	1.23[c]		8.1 / 0.35		0.0 / 0.00	77 / 1.26		4.4 / 0.12			0.2			114[e]	22	61	0	4		
4/10 1220	84.9	59	10.2	100	139	7.9 / 7.8	1.08[c]		8.5 / 0.37		0.0 / 0.00	74 / 1.21		5.0 / 0.14			0.1			104[e]	26	54	0	1		
5/1 1210	70.0	57	10.1	97	137	7.3 / 7.9	11 / 0.55	6.0 / 0.49	9.6 / 0.42	0.5 / 0.01	0.0 / 0.00	73 / 1.20	3.0 / 0.06	4.8 / 0.14	0.4 / 0.01	0.1 / 0.01	0.1	34	Al 0.05 PO_4 0.05 ABS 0.0 [d]	106[f]	29	52	0	3		
6/7 1600	17.2	74	8.1	94	174	8.0 / 8.1	1.44[c]		11 / 0.48		0.0 / 0.00	95 / 1.56		9.5 / 0.27			0.0			131[e]	25	72	0	1		
7/5 1255	1.3	72	10.0	114	208	8.4 / 8.2	1.54[c]		15 / 0.65		0.0 / 0.00	106 / 1.74		12 / 0.34			0.2			156[e]	30	77	0	2		
8/9 1210	DRY																									
9/7 0955	DRY																									
10/9 1720	3.3	59	10.0	98	225	7.5 / 7.6	1.56[c]		16 / 0.70		0.0 / 0.00	117 / 1.92		13 / 0.37			0.3			169[e]	31	78	0	6		
11/10 0820	8.2	48	8.0	69	220	7.5 / 8.1	1.56[c]		16 / 0.70		0.0 / 0.00	102 / 1.67		13 / 0.37			0.2			165[e]	31	78	0	4		
12/7 1555	36	46	11.3	95	148	7.4 / 7.8	1.12[c]		8.6 / 0.37		0.0 / 0.00	72 / 1.18		7.8 / 0.22			0.1			111[e]	25	56	0	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

BIG CHICO CREEK NEAR CHICO (STA. 85)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in ppm / equivalents per million																			
1961																									Median 5.6	USGS
1/2 1200	39	38	13.2	99	181	7.6 / 7.9	1.48[c]		11 / 0.48		0.0 / 0.00	52 / 0.85		7.5 / 0.21			0.2			132[e]	24	74	31	13	Maximum 2,400.	
2/14 1613	267	50	11.5	102	91.3	7.4 / 7.9	0.76[c]		3.3 / 0.14		0.0 / 0.00	49 / 0.80		2.0 / 0.06			0.1			67[e]	16	38	0	4	Minimum 0.06	
3/3 0645	63	49	11.2	97	149	7.3 / 8.2	1.16[c]		7.4 / 0.32		0.0 / 0.00	77 / 1.26		4.0 / 0.11			0.1			109[e]	22	58	0	3		
4/10 1110	82	54	10.8	100	135	7.8 / 8.1	1.06[c]		7.9 / 0.34		0.0 / 0.00	72 / 1.18		3.0 / 0.08			0.1			99[e]	24	53	0	1		
5/1 1045	72	56	10.7	102	139	7.3 / 8.1	10 / 0.50	6.6 / 0.54	8.3 / 0.36	2.2 / 0.06	0.0 / 0.00	75 / 1.23	3.0 / 0.06	5.8 / 0.16	0.4 / 0.01	0.1 / 0.01	0.0	33	Al 0.04 Cu 0.01 d PO_4 0.00 ABS 0.0	106[f]	25	52	0	5		
6/8 0730	61	65	8.4	88	182	7.7 / 8.2	1.36[c]		12 / 0.52		0.0 / 0.00	95 / 1.56		10 / 0.28			0.1			133[e]	28	68	0	1		
7/6 0917	27	67	8.8	95	209	7.7 / 8.0	1.48[c]		16 / 0.70		0.0 / 0.00	106 / 1.74		12 / 0.34			0.1			153[e]	32	74	0	1		
8/9 1245	22	78	8.0	96	210	8.1 / 8.5	1.56[c]		14 / 0.61		2 / 0.07	105 / 1.72		14 / 0.39			0.3		Tot. Alk. 109	154[e]	28	78	0	4		
9/7 0855	21	65	9.0	95	223	7.9 / 8.2	17 / 0.85	8.6 / 0.71	17 / 0.74	1.1 / 0.03	0.0 / 0.00	113 / 1.85	3.2 / 0.07	14 / 0.39	3.9 / 0.06	0.1 / 0.01	0.1	39	Fe 0.01 ABS 0.0 Zn 0.02 d PO_4 0.35	160[f]	32	78	0	2		
10/10 0850	20	55	10.3	97	216	7.9 / 8.2	1.56[c]		17 / 0.74		0.0 / 0.00	112 / 1.84		11 / 0.31			0.0			158[e]	32	78	0	10		
11/16 1610	27	44	12.2	99	216	7.7 / 8.0	1.55[c]		16 / 0.70		0.0 / 0.00	112 / 1.84		12 / 0.34			0.2			158[e]	31	77	0	3		
12/7 1645	62	43	11.2	90	146	7.3 / 7.9	1.12[c]		8.5 / 0.37		0.0 / 0.00	71 / 1.16		7.0 / 0.20			0.1			107[e]	25	56	0	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

BIG CREEK ABOVE PINE FLAT DAM (STA. 33d)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/3 1030	7	38	10.6	79	120	7.1	—/0.72[c]		9.8/0.43		0.0/0.00	49/0.80		10/0.28			0.0				37	36	0	3	Median 14.6	
2/1 1030	11.8	46	11.3	95	105	7.6	—/0.62[c]		8.2/0.36		0.0/0.00	38/0.62		7.8/0.22			0.1				37	31	0	3	Maximum 620.	
2/28 1000	6.6	47	10.6	90	107	7.7	—/0.70[c]		8.5/0.37		0.0/0.00	43/0.70		8.4/0.24			0.1				35	35	0	1	Minimum 0.21	
4/3 1135	16.2	64	10.5	110	77	7.4	—/0.46[c]		6.6/0.29		0.0/0.00	37/0.61		4.5/0.13			0.1				39	23	0	2		
5/1 1200	10	52			91	7.5	8.3/0.41	1.2/0.10	8.8/0.38	1.4/0.04	0.0/0.00	38/0.62	3.0/0.06	7.6/0.21	0.1/0.00	0.0/0.00	0.0	24	Fe 0.01, Al 0.04, Cu 0.01, Zn 0.03 PO_4 0.00, ABS 0.1	73	41	26	0	1		
6/5 1055	3.95				103	7.3	8.6/0.43	2.4/0.20	9.3/0.40		0.0/0.00	44/0.72		8.3/0.23			0.1				39	31	0	1		
7	DRY																									
8	DRY																									
9	DRY																									
10	DRY																									
11	DRY																									
12/4 1000	19	46	10.5	88	113	7.0	—/0.74[c]		9.7/0.43		0.0/0.00	30/0.49	10/0.21	12/0.34			0.1				37	37	12	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

BUTTE CREEK NEAR CHICO (STA. 84)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 2.3	
1/2 1105	178	37	13.2	97	101	7.4/7.8	0.92[c]		2.2/0.10		0.0/0.00	60/0.98		0.0/0.00			0.0			75[e]	10	46	0	6	Maximum 230.	
2/14 1515	558	48	11.4	98	79.1	7.4/7.9	0.68[c]		2.2/0.10		0.0/0.00	43/0.70		0.8/0.02			0.0			59[e]	13	34	0	4	Minimum 0.21	
3/3 0810	308	45	11.2	93	86	7.4/8.0	0.72[c]		2.9/0.13		0.0/0.00	53/0.87		0.0/0.00			0.0			64[e]	15	36	0	6		
4/10 1025	446	51	11.0	98	76	7.5/7.9	0.64[c]		2.8/0.12		0.0/0.00	41/0.67		0.2/0.01			0.0			56[e]	16	32	0	1		
5/1 1000	452	50	10.9	96	73	7.3/7.8	6.4/0.32	3.2/0.26	3.3/0.14	0.6/0.02	0.0/0.00	45/0.74	0.0/0.00	0.5/0.01	0.0/0.00	0.1/0.01	0.0	21	Al 0.02 ABS 0.0 PO_4 0.00 [d]	57[f]	19	29	0	10		
6/8 0820	276	59	9.1	89	78	7.5/7.8	0.72[c]		2.4/0.10		0.0/0.00	48/0.79		0.5/0.01			0.0			58[e]	12	36	0	3		
7/6 0810	179	60	8.7	87	95	7.4/7.8	0.90[c]		3.4/0.15		0.0/0.00	54/0.89		0.8/0.02			0.0			70[e]	14	45	1	2		
8/9 1415	118	75	8.9	103	105	8.1/8.2	0.92[c]		3.6/0.16		0.0/0.00	63/1.03		2.2/0.06			0.0			78[e]	15	46	0	3		
9/7 0800	114	59	9.4	92	114	7.3/7.9	12/0.60	4.9/0.40	4.1/0.18	1.1/0.03	0.0/0.00	70/1.15	0.0/0.00	0.6/0.02	0.0/0.00	0.1/0.01	0.0	22	Fe 0.04 Cu 0.01 PO_4 0.05 ABS 0.0 [d]	79[f]	15	50	0	3		
10/10 0945	72	50	10.9	96	124	7.5/7.9	1.08[c]		4.9/0.21		0.0/0.00	74/1.21		1.2/0.03			0.0			92[e]	16	54	0	5		
11/9 1700	70	49	10.6	92	126	7.5/8.1	1.11[c]		3.8/0.17		0.0/0.00	77/1.26		1.1/0.03			0.1			93[e]	13	56	0	3		
12/8 0805	129	40	11.3	87	115	7.2/7.8	1.04[c]		3.2/0.14		0.0/0.00	67/1.10		0.5/0.01			0.0			85[e]	12	52	0	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CACHE CREEK NEAR CAPAY (STA. 80)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										
1/5 1238	65	44	12.2	99	722	8.1 / 8.3	4.78[c]		61 / 2.65		6 / 0.20	248 / 4.06		88 / 2.48			3.4			402[e]	36	239	26	7	Median 3.6	USGS
2/19 1730	456	51	10.4	93	386	8.1 / 8.3	3.18[c]		26 / 1.13		3 / 0.10	163 / 2.67		29 / 0.82			1.1			215[e]	26	159	20	35	Maximum 230.	
3/1 1740	196	60	9.6	96	572	7.9 / 8.5	4.12[c]		41 / 1.78		11 / 0.37	216 / 3.54		51 / 1.44			1.9			318[e]	30	206	11	4	Minimum 0.23	
4/13 1440	128	68	9.6	104	574	8.3 / 8.5	4.08[c]		44 / 1.91		9 / 0.30	230 / 3.77		50 / 1.41			2.0			319[e]	32	204	1	1		
5/4 1320	337	64	9.4	98	414	8.1 / 8.3	28 / 1.40	23 / 1.86	29 / 1.26	3.3 / 0.08	3 / 0.10	197 / 3.23	17 / 0.35	26 / 0.73	0.2 / 0.00	0.2 / 0.01	1.4	13	Al 0.14 PO4 0.05[d] ABS 0.1	241[f]	27	163	0	5		
6/2 1300	320	71	9.0	101	383	8.3 / 8.4	3.03[c]		23 / 1.00		4 / 0.13	184 / 3.02		22 / 0.62			1.3			213[e]	25	151	0	15		
7/8 1500	406	82	8.1	102	324	8.3 / 8.3	2.85[c]		17 / 0.74		4 / 0.13	169 / 2.77		12 / 0.34			1.1			180[e]	21	142	0	6		
8/14 0930	340	74	7.8	90	337	8.0 / 8.2	2.81[c]		18 / 0.78		0 / 0.00	183 / 3.00		13 / 0.37			0.9			187[e]	25	140	0	20		
9/6 0935	176	70	9.0	100	362	7.6 / 8.3	26 / 1.30	22 / 1.78	20 / 0.87	2.8 / 0.07	2 / 0.07	190 / 3.11	11 / 0.23	17 / 0.48	0.3 / 0.00	0.3 / 0.02	1.1	6.5	Zn 0.05 PO4 0.05[d] Cu 0.01 ABS 0.0	203[f]	22	154	0	6		
10/5 0915	43	66	9.2	98	490	7.7 / 8.3	3.62[c]		34 / 1.48		10 / 0.33	214 / 3.51		36 / 1.02			0.0			272[e]	29	181	0	6		
11/8 0835	7.5	49	10.0	88	606	8.3 / 8.4	4.03[c]		55 / 2.39		5 / 0.17	237 / 3.88		67 / 1.89			1.7			336[e]	37	202	0	2		
12/6 0815	170	50	10.6	94	625	7.7 / 8.4	4.04[c]		55 / 2.39		6 / 0.20	201 / 3.29		78 / 2.20			2.9			348[e]	37	202	27	15		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CACHE CREEK NEAR LOWER LAKE (STA. 42)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median	USGS
1/4 1000	1.6	40	11.0	85	229	7.6 / 7.9	2.02[c]		9.2 / 0.40		0 / 0.00	122 / 2.00		3.8 / 0.11			0.6			127[e]	17	101	1	30	6.2	
2/16 1700	2.2	51	10.2	91	216	7.5 / 7.6	1.74[c]		9.7 / 0.42		0 / 0.00	98 / 1.61		5.0 / 0.14			0.3			120[e]	19	87	7	40	Maximum 620.	
3/13 1710	3.4	54	10.0	93	231	7.5 / 7.6	1.88[c]		9.9 / 0.43		0 / 0.00	104 / 1.70		5.8 / 0.16			0.3			128[e]	19	94	9	50	Minimum 0.23	
4/12 1000	7.9	55	9.0	84	253	7.4 / 7.7	2.10[c]		12 / 0.52		0 / 0.00	107 / 1.75		6.0 / 0.17			0.4			140[e]	20	105	17	11		
5/3 0840	236	62	9.2	94	293	7.5 / 7.8	25 / 1.25	19 / 1.55	13 / 0.57	2.3 / 0.06	0 / 0.00	181 / 2.97	9.0 / 0.19	7.1 / 0.20	1.9 / 0.03	0.1 / 0.01	0.9	7.0	Fe 0.01 Al 0.08[d] PO4 0.10 Cu 0.02 ABS 0.0	174[f]	17	140	0	32		
6/2 0945	272	66	8.5	91	287	7.8 / 7.6	26 / 1.30	16 / 1.29	12 / 0.52		0 / 0.00	158 / 2.59		6.3 / 0.18			0.9			159[e]	14	130	0	25		
7/8 1115	416	76	7.9	93	281	8.2 / 8.0	2.57[c]		12 / 0.52		0 / 0.00	160 / 2.62		6.0 / 0.17			0.9			156[e]	17	128	0	4		
8/14 1220	368	80	7.2	89	293	8.0 / 7.8	2.57[c]		12 / 0.52		0 / 0.00	165 / 2.70		6.9 / 0.19			0.9			163[e]	17	128	0	20		
9/6 1255	246	75	8.0	93	302	7.7 / 8.3	26 / 1.30	17 / 1.42	12 / 0.52	2.7 / 0.07	2 / 0.07	167 / 2.74	8.0 / 0.17	9.2 / 0.26	0.9 / 0.01	0.0 / 0.00	0.9	0.6	PO4 0.05 Cu 0.01[d] ABS 0.0	161[f]	16	136	0	15		
10/5 1325	52	69	9.0	99	305	7.7 / 7.9	2.76[c]		12 / 0.52		0 / 0.00	176 / 2.88		6.0 / 0.17			0.6			169[e]	16	138	0	9		
11/8 1225	2.6	54	9.8	91	314	8.2 / 8.3	2.80[c]		14 / 0.61		3 / 0.10	176 / 2.88		6.8 / 0.19			1.0			174[e]	18	140	0	10		
12/6 1210	1.5	50	10.0	88	266	7.5 / 7.7	2.36[c]		12 / 0.52		0 / 0.00	146 / 2.39		6.2 / 0.17			0.8			148[e]	18	118	0	35		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CACHE CREEK, NORTH FORK NEAR LOWER LAKE (STA.79)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/4 0915	36	38	13.0	97	482	8.0 / 8.3	3.68[c]		30 / 1.30		12 / 0.40	190 / 3.11		43 / 1.21			3.7			273[e]	26	184	9	6	Median 2.3	USGS
2/16 1405	414	53	10.4	95	223	7.9 / 8.2	1.92[c]		9.8 / 0.43		0 / 0.00	117 / 1.92		5.5 / 0.16			0.5			127[e]	18	96	0	100	Maximum 230.	
3/13 1745	144	58	9.9	96	279	7.9 / 8.3	2.30[c]		15 / 0.65		2 / 0.07	142 / 2.33		14 / 0.39			0.9			158[e]	22	115	0	2	Minimum 0.2.	
4/12 0905	100	56	10.1	96	345	8.1 / 8.4	3.06[c]		18 / 0.78		5 / 0.17	186 / 3.05		14 / 0.39			1.5			196[e]	20	153	0	1		
5/3 0730	80	66	10.4	108	346	7.9 / 8.3	25 / 1.25	20 / 1.63	19 / 0.83	0.7 / 0.02	3 / 0.10	174 / 2.85	11 / 0.23	16 / 0.45	0.6 / 0.01	0.1 / 0.01	1.5	20	Al 0.07 PO4 0.05[d] ABS 0.0	203[f]	22	144	0	5		
6/2 1115	38	70	9.5	106	420	8.3 / 8.5	3.34[c]		25 / 1.09		9 / 0.30	187 / 3.06		29 / 0.82			2.3			238[e]	25	167	0	2		
7/8 1230	5.9	86	8.9	116	474	8.4 / 8.5	3.60[c]		30 / 1.30		13 / 0.43	182 / 2.98		42 / 1.18			3.3			269[e]	27	180	9	5		
8/14 1120	2.0	83	8.7	110	510	7.9 / 8.3	373[c]		37 / 1.61		5 / 0.17	207 / 3.56		52 / 1.47			3.7			289[e]	30	186	8	4		
9/6 1145	1.2	78	8.8	106	532	7.6 / 8.5	32 / 1.60	27 / 2.24	41 / 1.78	1.6 / 0.04	7 / 0.23	200 / 3.28	16 / 0.33	59 / 1.66	0.3 / 0.00	0.1 / 0.01	4.1	19	Cu 0.01 PO4 0.05[d] ABS 0.0	305[f]	31	192	17	3		
10/5 1159	1.4	71	10.6	119	524	7.8 / 8.5	3.68[c]		40 / 1.74		14 / 0.47	182 / 2.98		54 / 1.52			1.2			297[e]	32	184	12	6		
11/8 1100	1.9	52	13.3	121	556	8.3 / 8.4	3.76[c]		44 / 1.91		10 / 0.33	182 / 2.98		60 / 1.69			5.7			315[e]	34	188	22	2		
12/6 1110	66	50	10.9	96	508	7.7 / 8.3	3.55[c]		38 / 1.65		4 / 0.13	186 / 3.05		60 / 1.69			3.9			288[e]	32	177	17	2		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CACHE SLOUGH BELOW LINDSEY SLOUGH (STA. 110a)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million													Total[g] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
														equivalents per million												
			ppm	%Sat			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents			Total ppm	N.C. ppm			
2/20 1345		52			214				16					15						146	33					USBR
4/10 1115		62			175				9.0					8.0						126	22					USBR
7/18 1025		78			196				12					11						136	27					USBR
10/25 1050		64			283				12					12						142	18					USBR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CALAVERAS RIVER AT JENNY LIND (STA. 16a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
1961																									Median 6.2	USGS
1/3 1015	14	41	11.9	93	292	7.3/8.1	2.60[c]		9.3/0.40		0/0.00	119/1.95		10/0.28			0.0			180[e]	13	130	32	4	Maximum 2400.	
2/6 1040	45	53	10.4	95	281	7.7/8.2	2.39[c]		10/0.44		0/0.00	114/1.87		9.0/0.25			0.0			173[e]	16	120	27	20	Minimum 0.23	
3/1 1200	0.5	58	8.2	80	310	7.3/8.3	2.72[c]		8.4/0.37		1/0.03	125/2.05		11/0.31			0.1			191[e]	12	136	32	1		
4/3 1200	0.9	68	8.3	90	340	7.3/8.0	2.96[c]		9.4/0.41		0/0.00	145/2.38		17/0.48			0.1			205[e]	12	148	29	1		
5/8 1005	3.5	69	9.3	102	319	7.7/7.8	35/1.75	13/1.07	13/0.57	2.2/0.06	0/0.00	155/2.54	26/0.54	13/0.37	0.8/0.01	0.1/0.01	0.2	13	Al 0.03 PO4 0.15 Cu 0.01 ABS 0.0 [d]	192[f]	17	141	14	17		
6/1 1300	3.4	73	10.0	114	309	7.9/8.4	2.68[c]		12/0.52		3/0.10	145/2.38		11/0.31			0.1			190[e]	16	134	10	2		
7/		Dry	Not Sampled																							
8/		Dry	Not Sampled																							
9/		Dry	Not Sampled																							
10/4 1035	0.9	68	7.0	76	346	7.6/7.8	3.06[c]		11/0.48		0/0.00	176/2.88		11/0.31			0.0			213[e]	14	153	9	15		
11/		Dry	Not Sampled																							
12/12 0925	13	46	10.2	85	363	7.5/8.0	3.18[c]		14/0.61		0/0.00	150/2.46		18/0.51			0.1			223[e]	16	159	36	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CHOWCHILLA RIVER AT BUCHANAN DAM SITE (STA. 114)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/4 0910	5.2	38	13.0	97	483	7.9	2.56[c]		40 / 1.74		0.0 / 0.00	102 / 1.67		91 / 2.57			0.0			297	40	128	44	3	Median 6.2	
2/8 1450	12	62	9.7	99	345	8.2	1.96[c]		31 / 1.35		0.0 / 0.00	98 / 1.61		55 / 1.55			0.1			212	41	98	18	2	Maximum 62.	
3/3 1015	11	54	10.5	97	345	8.2	1.86[c]		27 / 1.17		0.0 / 0.00	101 / 1.66		54 / 1.52			0.1			212	39	93	10	0	Minimum 0.62	
4/5 1030	16	72	8.9	101	254	8.2	1.46[c]		23 / 1.00		0.0 / 0.00	90 / 1.48		36 / 1.02			0.0			156	41	73	0	1		
5/10 1200	8.1	75	8.4	98	315	8.1	25 / 1.25	4.5 / 0.37	31 / 1.35	2.4 / 0.06	0.0 / 0.00	94 / 1.54	3.0 / 0.06	48 / 1.35	0.0 / 0.00	0.1 / 0.01	0.1	24	Al 0.02, PO_4 0.00, ABS 0.0	184	45	81	4	25		
6/5 1355	2.2	91	7.2	97	433	8.2	2.20[c]		40 / 1.74		0.0 / 0.00	97 / 1.59		83 / 2.34			0.0			270	44	110	30	0.8		
7	DRY																									
8	DRY																									
9	DRY																									
10	DRY																									
11	DRY																									
12/7 1025		51	10.8	97	609	7.9	3.08[c]		55 / 2.39		0.0 / 0.00	90 / 1.48		133 / 3.75			0.1			375	44	154	80	7		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

CLEAR CREEK NEAR IGO (STA. 12d)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/10 1555	158	45	11.7	97	111	7.1 / 7.2	0.88[c]		6.5 / 0.28		0.0 / 0.00	46 / 0.75		6.0 / 0.17			0.0			71[e]	24	44	6	7		USGS
2/13 1435	1,460	48	11.8	102	63.3	7.1 / 7.8	0.52[c]		3.0 / 0.13		0.0 / 0.00	26 / 0.43		0.5 / 0.01			0.0			41[e]	20	26	5	15		
3/6 1410	338	48	11.5	99	83	7.3 / 7.8	0.61[c]		5.5 / 0.24		0.0 / 0.00	33 / 0.54		2.8 / 0.08			0.0			53[e]	28	30	3	30		
4/10 1500	390	56	10.6	101	81	7.4 / 7.8	0.60[c]		4.3 / 0.19		0.0 / 0.00	36 / 0.59		3.2 / 0.09			0.0			52[e]	24	30	0	0.3		
5/8 1320	247	60	9.9	99	83	7.4 / 7.6	10 / 0.50	2.1 / 0.17	4.8 / 0.21	0.7 / 0.02	0.0 / 0.00	37 / 0.61	7.0 / 0.15	4.0 / 0.11	0.2 / 0.00	0.0 / 0.00	0.0	17	Fe 0.01 Cu 0.01 d Al 0.04 PO_4 0.05 ABS 0.0	64[f]	23	34	4	4		
6/12 1340	134	70	8.6	96	110	7.5 / 7.7	0.88[c]		6.7 / 0.29		0.0 / 0.00	48 / 0.79		6.4 / 0.18			0.0			71[e]	25	44	5	8		
7/10 1300	52	78	8.2	99	140	7.5 / 8.0	0.97[c]		9.9 / 0.43		0.0 / 0.00	56 / 0.92		9.4 / 0.27			0.0			90[e]	31	48	2	7		
8/7 1520	33	83	8.1	103	191	8.1 / 8.0	1.22[c]		14 / 0.61		0.0 / 0.00	66 / 1.08		19 / 0.54			0.0			123[e]	33	61	7	2		
9/7 1100	23	70	9.0	100	202	7.8 / 8.0	19 / 0.95	3.5 / 0.29	15 / 0.65	1.6 / 0.04	0.0 / 0.00	69 / 1.13	9.0 / 0.19	22 / 0.62	0.4 / 0.01	0.1 / 0.01	0.0	14	Fe 0.30 Cu 0.01 d Al 0.02 As 0.01 PO_4 0.10 ABS 0.0	119[f]	34	62	5	100		
10/5 1005	25	58	9.5	92	219	8.1 / 8.2	1.46[c]		15 / 0.65		0.0 / 0.00	73 / 1.20		22 / 0.62			0.0			141[e]	31	73	6	6		
11/9 0920	34	47	11.2	95	220	8.3 / 8.7	1.56[c]		13 / 0.57		8 / 0.27	68 / 1.11		19 / 0.54			0.0		Tot. Alk. 84	141[e]	27	78	9	30		
12/7 1120	204	43	10.7	86	120	7.2 / 7.6	0.86[c]		5.2 / 0.23		0.0 / 0.00	43 / 0.70		7.5 / 0.21			0.0			77[e]	21	43	8	15		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CLEAR LAKE AT LAKEPORT (STA. 41)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 6.2	USGS
1/4 1110		45	8.2	68	264	7.5 / 7.9	— / 2.38[g]		9.7 / 0.42		0 / 0.00	150 / 2.46		4.5 / 0.13			0.8			148[e]	15	119	0	10	Maximum 62.	
2/16 1800		52	9.8	88	252	7.4 / 8.2	— / 2.20[g]		9.2 / 0.40		0 / 0.00	135 / 2.21		6.0 / 0.17			0.9			141[e]	15	110	0	40	Minimum < 0.045	
3/13 1600		53	9.9	91	252	7.5 / 7.9	— / 2.22[g]		9.3 / 0.40		0 / 0.00	142 / 2.33		4.7 / 0.13			0.8			141[e]	15	111	0	120		
4/12 1130		55	4.5	42	250	7.3 / 7.7	— / 2.24[g]		9.7 / 0.42		0 / 0.00	138 / 2.26		5.5 / 0.16			0.9			140[e]	16	112	0	35		
5/3 1015		58	8.7	85	253	7.5 / 8.0	22 / 1.10	21 / 1.70	10 / 0.44	1.8 / 0.05	0 / 0.00	176 / 2.88	9.6 / 0.20	6.2 / 0.17	1.7 / 0.03	0.1 / 0.01	0.8	14	Fe 0.01 Al 0.06[d] PO_4 0.05 Cu 0.03 Zn 0.04 ABS 0.0	174[f]	13	140	0	30		
6/2 0840		65	7.5	79	262	7.9 / 8.1	22 / 1.10	15 / 1.24	10 / 0.44		0 / 0.00	149 / 2.44		4.8 / 0.14			0.8			147[e]	16	117	0	10		
7/8 0915		76	8.6	101	270	8.0 / 8.2	— / 2.53[g]		11 / 0.48		0 / 0.00	154 / 2.52		5.5 / 0.16			0.9			151[e]	16	127	1	6		
8/14 1340		81	13.0	161	283	8.4 / 7.9	— / 2.45[g]		11 / 0.48		0 / 0.00	164 / 2.69		6.6 / 0.19			0.9			159[e]	16	123	0	25		
9/6 1405		79	11.4	139	286	7.7 / 8.1	24 / 1.20	17 / 1.39	12 / 0.52	2.4 / 0.06	0 / 0.00	159 / 2.61	7.0 / 0.15	8.8 / 0.25	3.2 / 0.05	0.0 / 0.00	0.8	10	PO_4 0.35 ABS 0.0[d]	163[f]	16	129	0	10		
10/5 1450		63	8.5	88	288	7.7 / 8.1	— / 2.58[g]		11 / 0.48		0 / 0.00	166 / 2.72		5.8 / 0.16			0.5			162[e]	16	129	0	10		
11/8 1405		58	7.5	73	297	7.9 / 8.2	— / 2.68[g]		13 / 0.57		0 / 0.00	172 / 2.82		6.2 / 0.17			0.8			165[e]	18	134	0	40		
12/6 1420		52	8.2	74	272	7.6 / 8.0	— / 2.45[g]		11 / 0.48		0 / 0.00	151 / 2.47		6.8 / 0.19			0.8			153[e]	16	123	0	35		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino [illegible] Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Be[illegible] Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

COLUSA TROUGH NEAR COLUSA (STA. 87)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/4 0805	167	43	11.3	91	1,190	7.9 / 8.1	— / 5.95[c]		136 / 5.92		0.0 / 0.00	308 / 5.05		88 / 2.48			0.3			708[e]	50	298	45	50	Median 62.	USGS
2/16 1453	697	54	9.7	90	809	7.9 / 8.0	— / 3.52[c]		94 / 4.09		0.0 / 0.00	231 / 3.79		60 / 1.69			0.3			481[e]	54	176	0	500	Maximum 7,000.	
3/2 0900	154	58	9.5	92	1,300	8.1 / 8.4	— / 6.58[c]		163 / 7.09		10 / 0.33	302 / 4.95		110 / 3.10			0.4		Tot. Alk. 322	774[e]	52	329	65	60	Minimum 13.	
4/12 0725	630	61	8.2	83	416	7.8 / 7.9	— / 2.50[c]		39 / 1.70		0.0 / 0.00	146 / 2.39		23 / 0.65			0.2			248[e]	40	125	5	120		
5/2 1650	687	66	8.5	90	437	7.5 / 7.9	21 / 1.05	16 / 1.33	48 / 2.09	2.6 / 0.07	0.0 / 0.00	148 / 2.43	64 / 1.33	24 / 0.68	1.6 / 0.03	0.3 / 0.02	0.1	18	Fe 0.04 Al 0.12 Cu 0.01 PO_4 0.30 ABS 0.0 [d]	269[f]	46	119	0	2		
6/8 1230	770	72	7.0	80	454	7.6 / 7.9	— / 2.12[c]		52 / 2.26		0.0 / 0.00	170 / 2.79		26 / 0.73			0.1			270[e]	48	121	0	100		
7/7 1445	541	78	7.2	87	471	7.5 / 7.9	— / 2.86[c]		42 / 1.83		0.0 / 0.00	192 / 3.15		24 / 0.68			0.2			280[e]	39	143	0	33		
8/10 0935	931	78	6.6	80	430	7.5 / 8.2	— / 2.72[c]		43 / 1.87		0.0 / 0.00	192 / 3.15		22 / 0.62			0.3			256[e]	41	136	0	48		
9/7 1145	1,153	69	7.6	84	442	7.7 / 8.0	26 / 1.30	17 / 1.37	42 / 1.83	1.8 / 0.05	0.0 / 0.00	195 / 3.20	33 / 0.69	21 / 0.59	0.0 / 0.00	0.4 / 0.02	0.1	18	Fe 0.22 ABS 0.0 Al 0.07 PO_4 0.25 [d]	255[f]	40	134	0	25		
10/10 1400	192	64	9.1	95	478	7.9 / 7.9	— / 2.94[c]		46 / 2.00		0.0 / 0.00	193 / 3.16		27 / 0.76			0.1			284[e]	40	147	0	15		
11/17 0955	265	44	10.7	87	515	8.0 / 7.9	— / 2.90[c]		55 / 2.39		0.0 / 0.00	231 / 3.79		28 / 0.79			0.2			306[e]	45	145	0	30		
12/8 1030	505	45	8.8	73	807	7.6 / 7.8	— / 4.24[c]		95 / 4.13		0.0 / 0.00	229 / 3.75		58 / 1.64			0.3			480[e]	49	212	24	60		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

CONTRA COSTA CANAL AT FIRST PUMP LIFT (STA. 109a)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total[g] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1/16 1450		46			908	7.6	53	20	89	2.0	0.0	115	117	146	7.4					648	47					USBR
2/20 1300		--			1029	7.4	55	32	101	3.1	0.0	129	165	168	6.8		0.52			738	45					USBR
3/15 1130		60			568	7.9	31	20	52	2.0	0.0	94	81	89	2.5					374	41					USBR
4/10 1510		62			247	7.9	19	10	23	2.0	0.0	73	24	33	0.0					194	36					USBR
5/11 1355		65			220	7.8	15	9.3	20	1.6	0.0	71	24	26	0.0		0.47			184	36					USBR
6/14 1010		76			236	7.6	15	10	20	1.6	0.0	77	19	21	0.0					156	35					USBR
7/20 1210		79			696	7.8	24	20	78	2.7	0.0	92	45	149	0.0					396	54					USBR
8/16 0900		73			1118	7.8	24	26	141	4.3	0.0	111	63	278	0.0					656	64					USBR
9/19 0935		68			605	7.5	17	20	67	2.7	0.0	88	32	115	0.0					346	53					USBR
10/24 1305		--			248	7.6	20	16	41	2.3	0.0	109	31	61	0.0					248	43					USBR
11/13 1035		56			442	7.8	21	17	42	1.6	0.0	96	46	61	1.2					280	42					USBR
12/11 0845		--			514	7.5	27	19	47	3.1	0.0	104	66	67	2.5					316	41					USBR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

COSUMNES RIVER AT MCCONNELL (STA. 94a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 9.6	USGS
1/6 1115	9.6	37	13.5	99	100	7.2 / 7.7	/ 0.82[c]		4.5 / 0.20		0 / 0.00	52 / 0.85		2.2 / 0.06			0.1			75[e]	20	41	0	4	Maximum 1300.	
2/9 1335	78	56	10.0	95	124	7.3 / 7.8	/ 0.98[c]		5.0 / 0.22		0 / 0.00	54 / 0.89		3.0 / 0.08			0.1			93[e]	18	49	5	10	Minimum 0.62	
3/10 1300	69	57	10.5	101	99	7.3 / 7.8	/ 0.84[c]		3.3 / 0.14		0 / 0.00	49 / 0.80		2.5 / 0.07			0.1			74[e]	14	42	2	3		
4/6 1100	242	63	9.2	95	73	7.4 / 7.6	/ 0.60[c]		3.6 / 0.16		0 / 0.00	37 / 0.61		2.8 / 0.08			0.0			55[e]	21	30	0	7		
5/11 1305		68	8.9	97	67	7.3 / 7.6	6.0 / 0.30	2.9 / 0.24	2.9 / 0.13	0.9 / 0.02	0 / 0.00	36 / 0.59	2.0 / 0.04	1.5 / 0.04	0.2 / 0.00	0.1 / 0.01	0.1	18	Fe 0.01 PO4 0.05[d] ABS 0.0	53[f]	19	27	0	20		
6/1 0640	40	65	8.9	94	68	7.3 / 6.8	/ 0.53[c]		3.5 / 0.15		0 / 0.00	36 / 0.59		2.6 / 0.07			0.0			51[e]	22	27	0	2		
7/		Not Sampled		Dry																						
8/		Not Sampled		Dry																						
9/		Not Sampled		Dry																						
10/		Not Sampled		Dry																						
11/		Not Sampled		Dry																						
12/4 1335	122	51	10.9	98	96	7.0 / 7.5	/ 0.79[c]		4.2 / 0.18		0 / 0.00	41 / 0.67		4.0 / 0.11			0.0			72[e]	19	40	6	45		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

COSUMNES RIVER AT MICHIGAN BAR (STA. 94)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																									Median 5.6	USGS
1/3 0840	32	37	13.2	97	93.1	7.1/7.7	0.72[c]		4.0/0.17		0/0.00	44/0.72		2.2/0.06			0.0			69[e]	19	36	0	4	Maximum 2400.	
2/6 0845	92	51	10.6	95	120	7.3/7.9	1.00[c]		4.8/0.21		0/0.00	54/0.89		4.0/0.11			0.0			89[e]	17	50	6	6	Minimum 0.23	
3/1 0830	65	50	11.1	98	100	7.3/7.8	0.84[c]		3.3/0.14		0/0.00	49/0.80		2.1/0.06			0.1			74[e]	14	42	2	5		
4/3 0905	242	62	9.8	100	79	7.3/7.9	0.66[c]		5.6/0.24		0/0.00	39/0.64		2.9/0.08			0.0			59[e]	27	33	1	1		
5/8 0805	187	62	9.8	100	59	7.2/7.4	4.0/0.20	2.9/0.24	2.9/0.13	0.9/0.02	0/0.00	32/0.52	0.0/0.00	3.0/0.08	0.1/0.00	0.1/0.01	0.0	19	Fe 0.01 Al 0.01 Zn 0.01 PO_4 0.00 ABS 0.0 [d]	49[f]	22	22	0	4		
6/1 1450	105	68	9.5	104	58	7.9/7.7	0.44[c]		3.0/0.13		0/0.00	31/0.51		2.2/0.06			0.1			43[e]	23	22	0	1		
7/10 0730	34	81	7.4	92	67	7.4/7.6	0.52[c]		3.2/0.14		0/0.00	33/0.54		1.5/0.04			0.0			50[e]	21	26	0	2		
8/10 1450	16	84	9.1	117	70	7.6/7.8	0.55[c]		3.1/0.13		0/0.00	40/0.66		0.3/0.01			0.0			52[e]	19	27	0	-		
9/11 1300	6.2	79	9.2	112	78	7.6/7.7	7.6/0.38	3.5/0.29	2.7/0.12	1.1/0.03	0/0.00	43/0.70	3.0/0.06	1.5/0.04	0.0/0.00	0.1/0.01	0.0	15	Cu 0.01 Zn 0.02 PO_4 0.05 ABS 0.0 [d]	56[f]	15	34	0	3		
10/9 1250	0	62	9.8	100	91	7.6/7.7	0.72[c]		3.5/0.15		0/0.00	47/0.77		3.0/0.08			0.2			68[e]	17	36	0	15		
11/9 1255	16	56	11.2	106	100	7.7/7.8	0.78[c]		3.8/0.17		0/0.00	53/0.87		2.6/0.07			0.0			74[e]	18	39	0	2		
12/4 1445	99	50	11.4	101	73	7.1/7.4	0.56[c]		3.1/0.13		0/0.00	33/0.54		2.8/0.08			0.0			54[e]	19	28	1	6		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

COTTONWOOD CREEK NEAR COTTONWOOD (STA. 12b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/10 1245	200	49	9.8	85	246	7.2/7.9	2.44[c]		11/0.48		0.0/0.00	145/2.38		13/0.37			0.0			144[e]	16	122	3	2	Median 23.	USGS
2/13 1045	2,660	48	10.9	94	199	7.5/8.1	1.72[c]		6.6/0.29		0.0/0.00	98/1.61		3.2/0.09			0.0			117[e]	14	86	6	40	Maximum 620.	
3/6 1030	620	57	9.8	94	228	7.3/7.8	1.93[c]		10/0.44		0.0/0.00	113/1.85		6.2/0.17			0.0			134[e]	19	97	4	2	Minimum 2.3	
4/10 1055	612	62	9.3	95	222	7.4/8.3	2.04[c]		8.3/0.36		1/0.03	117/1.92		5.5/0.16			0.0		Tot. Alk. 119	130[e]	15	102	4	2		
5/8 1015	440	64	9.1	95	191	7.5/7.8	20/1.00	8.8/0.72	8.5/0.37	1.3/0.03	0.0/0.00	107/1.75	8.0/0.17	5.5/0.16	0.5/0.01	0.1/0.01	0.0	22	Al 0.01 d; PO_4 0.05; Cu 0.01 ABS 0.0	128[f]	17	86	0	4		
6/12 1010	233	70	8.5	94	200	7.3/7.9	1.79[c]		8.3/0.36		0.0/0.00	106/1.74		5.8/0.16			0.0			117[e]	17	90	3	5		
7/10 1000	90	76	8.1	95	205	7.4/8.2	1.74[c]		9.1/0.40		0.0/0.00	116/1.90		3.8/0.11			0.0			120[e]	19	87	0	5		
8/8 1005	66	77	8.6	102	184	7.3/8.0	1.56[c]		8.5/0.37		0.0/0.00	102/1.67		4.4/0.12			0.1			108[e]	19	78	0	2		
9/7 1335	61	76	10.2	120	177	7.6/8.0	16/0.80	8.5/0.70	8.5/0.37	1.4/0.04	0.0/0.00	99/1.62	5.0/0.10	4.0/0.11	0.4/0.01	0.1/0.01	0.0	28	Fe 0.09 Cu 0.01 d; Mn 0.09 ABS 0.0; PO_4 0.05	121[f]	19	75	0	4		
10/5 1220	73	71	11.1	125	176	7.7/8.0	1.52[c]		7.7/0.33		0.0/0.00	96/1.57		3.2/0.09			0.0			103[e]	18	76	0	3		
11/9 1050	96	55	11.0	104	183	7.3/8.0	1.56[c]		8.0/0.35		0.0/0.00	98/1.61		5.5/0.16			0.0			107[e]	18	78	0	6		
12/7 1330	255	50	10.0	88	237	7.2/7.7	1.92[c]		11/0.48		0.0/0.00	98/1.61		16/0.45			0.0			139[e]	20	96	16	6		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

COTTONWOOD CREEK BELOW NORTH FORK COTTONWOOD CREEK (STA. 11a)

Date and time sampled P.S.T	Discharge in cfs (Est. by sampler)	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/10 1520	75	47	11.2	95	179	7.3/7.6	—/1.76[c]		8.1/0.35		0.0/0.00	109/1.79		8.5/0.24			0.0			113[e]	17	88	0	2		USGS
2/13 1600	200	48	11.2	97	147	7.3/8.1	—/1.24[c]		5.6/0.24		0.0/0.00	58/0.95		2.2/0.06			0.0			92[e]	16	62	14	40		
3/6 1330	150	52	11.0	100	210	7.9/8.1	—/1.85[c]		7.2/0.31		0.0/0.00	104/1.70		4.2/0.12			0.0			132[e]	14	92	7	15		
4/10 1735	185	55	9.7	92	217	8.0/8.3	—/2.14[c]		6.1/0.27		1/0.03	117/1.92		3.5/0.10			0.0		Tot. Alk. 119	136[e]	11	107	9	4		
5/8 1230	240.	65	9.3	98	182	7.9/8.0	20/1.00	9.5/0.78	6.3/0.27	0.8/0.02	0.0/0.00	108/1.77	8.0/0.17	4.2/0.12	0.1/0.00	0.1/0.01	0.0	19	Al 0.06 d; PO_4 0.05; Cu 0.01; ABS 0.0	121[f]	13	89	0	5		
6/12 1435	75	84	7.2	92	199	7.7/7.9	—/1.68[c]		8.6/0.37		0.0/0.00	99/1.62		7.6/0.21			0.0			125[e]	18	84	3	6		
7/10 1140	55	85	7.1	92	268	7.8/8.3	—/2.39[c]		8.7/0.38		4/0.13	139/2.28		8.2/0.23			0.0		Tot. Alk. 147	169[e]	14	119	0	6		
8/7 1415	18	90	8.8	119	279	8.1/8.4	—/2.56[c]		10/0.44		4/0.13	146/2.39		12/0.34			0.0		Tot. Alk. 154	175[e]	15	128	2	2		
9/7 1145	12	75	8.8	102	283	7.9/8.4	29/1.45	13/1.07	11/0.48	1.4/0.04	3/0.10	143/2.34	7.0/0.15	15/0.42	0.2/0.00	0.1/0.01	0.0	22	Fe 0.05 d; Cu 0.01; Tot. Alk. 149; PO_4 0.05; ABS 0.0	172[f]	16	126	4	3		
10/5 1045	10	69	9.0	99	274	7.7/8.2	—/2.42[c]		12/0.52		0.0/0.00	140/2.29		14/0.39			0.1			172[e]	18	121	6	3		
11/9 0950	12	51	11.0	98	315	7.8/8.3	—/2.74[c]		12/0.52		3/0.10	151/2.47		19/0.54			0.0		Tot. Alk. 157	198[e]	16	137	8	2		
12/7 1150	200	43	11.6	94	190	7.4/7.8	—/1.60[c]		4.9/0.21		0.0/0.00	84/1.38		10/0.28			0.0			120[e]	12	80	11	8		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

COTTONWOOD CREEK, SOUTH FORK ABOVE COTTONWOOD CREEK (STA. 11b)

Date and time sampled P.S.T	Discharge in cfs (Est. by sampler)	Temp. in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/3 1000	40	38	13.0	97	370	7.8 / 6.1	— / 3.30[c]		17 / 0.73		0.0 / 0.00	174 / 2.85		33 / 0.93			0.1			252[e]	19	165	22	1		USGS
2/15 1630	500	55	11.9	112	252	7.6 / 8.2	— / 2.12[c]		10 / 0.44		0.0 / 0.00	117 / 1.92		8.2 / 0.23			0.0			172[e]	17	106	10	30		
3/14 1100	105	56	11.2	107	319	7.7 / 8.3	— / 2.98[c]		15 / 0.65		3 / 0.10	139 / 2.28		17 / 0.48			0.2		Tot. Alk. 145	218[e]	20	129	10	8		
4/11 0845	60	58	9.8	95	251	7.7 / 8.4	— / 2.16[c]		11 / 0.48		2 / 0.07	122 / 2.00		10 / 0.28			0.1		Tot. Alk. 126	171[e]	18	108	5	4		
5/2 0900	180	60	9.6	96	248	7.7 / 8.1	28 / 1.40	8.6 / 0.71	11 / 0.48	0.8 / 0.02	0.0 / 0.00	122 / 2.00	13 / 0.27	9.8 / 0.28	0.0 / 0.00	0.1 / 0.01	0.1	10	Fe 0.02 Al 0.03 PO_4 0.00 d ABS 0.0	141[f]	18	105	5	2		
6/6 0745	150	67	8.4	90	202	7.5 / 8.2	— / 1.60[c]		9.2 / 0.40		0.0 / 0.00	100 / 1.64		9.5 / 0.27			0.2			138[e]	19	84	2	5		
7/7 0750		73	8.2	94	255	7.3 / 8.4	— / 2.04[c]		12 / 0.52		5 / 0.17	116 / 1.90		13 / 0.37			0.0		Tot. Alk. 126	174[e]	20	102	0	4		
8/7 1330	½-	92	6.4	88	280	7.7 / 8.2	— / 2.30[c]		14 / 0.61		0.0 / 0.00	138 / 2.26		14 / 0.39			0.2			191[e]	21	115	2	2		
9/7 1240	DRY																									
10/5 1145	DRY																									
11/9 1230	DRY																									
12/7 1250	35	48	11.3	97	460	7.7 / 8.1	— / 3.46[c]		26 / 1.13		0.0 / 0.00	136 / 2.23		56 / 1.58			0.0			314[e]	25	173	61	6		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

COW CREEK NEAR MILLVILLE (STA. 88a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1961																										USGS
1/10 1345	222	47	11.8	100	162	7.1 / 7.6	— / 1.39[c]		9.6 / 0.42		0.0 / 0.00	70 / 1.15		6.8 / 0.19			0.0			117[e]	23	69	12	13		
2/13 1200	1,710	48	11.5	99	98.9	7.1 / 7.8	— / 0.82[c]		4.2 / 0.18		0.0 / 0.00	45 / 0.74		2.2 / 0.06			0.0			72[e]	18	41	4	10		
3/6 1145	470	50	11.4	101	128	7.3 / 7.8	— / 0.98[c]		5.7 / 0.25		0.0 / 0.00	58 / 0.95		4.5 / 0.13			0.2			93[e]	20	49	1	9		
4/10 1350	545	58	10.7	104	104	7.3 / 7.9	— / 0.84[c]		5.1 / 0.22		0.0 / 0.00	50 / 0.82		2.0 / 0.16			0.0			75[e]	21	42	1	1		
5/8 1145	428	60	9.9	99	105	7.3 / 7.9	10 / 0.50	4.1 / 0.34	4.8 / 0.21	0.9 / 0.02	0.0 / 0.00	53 / 0.87	4.4 / 0.09	4.6 / 0.13	0.0 / 0.00	0.0 / 0.00	0.0	26	Fe 0.00 Al 0.05 d; PO_4 0.05; Zn 0.08; ABS 0.0	81[f]	20	42	0	5		
6/12 1110	224	73	8.1	93	110	7.5 / 7.9	— / 0.93[c]		5.1 / 0.22		0.0 / 0.00	62 / 1.02		4.0 / 0.11			0.0			80[e]	19	46	0	1		
7/10 1500	43	90	7.8	105	152	7.8 / 8.1	— / 1.22[c]		7.9 / 0.34		0.0 / 0.00	82 / 1.34		4.5 / 0.13			0.1			110[e]	22	61	0	4		
8/8 0825	19	83	6.5	82	178	7.3 / 8.0	— / 1.48[c]		8.4 / 0.37		0.0 / 0.00	99 / 1.62		6.5 / 0.18			0.2			129[e]	20	74	0	7		
9/7 1500	18	79	10.3	126	182	8.1 / 8.3	19 / 0.95	6.8 / 0.56	7.9 / 0.34	1.8 / 0.05	2 / 0.07	100 / 1.64	1.0 / 0.02	5.4 / 0.15	1.1 / 0.02	0.2 / 0.01	0.0	35	Fe 0.03 PO_4 0.05; Zn 0.01 Tot.Alk. 104; ABS 0.0 d	129[f]	18	75	0	4		
10/5 1345	24	73	9.4	108	177	7.9 / 8.2	— / 1.44[c]		9.5 / 0.41		0.0 / 0.00	97 / 1.59		5.5 / 0.16			0.1			128[e]	22	72	0	10		
11/9 1200	81	51	10.4	93	154	7.5 / 7.9	— / 1.22[c]		8.1 / 0.35		0.0 / 0.00	79 / 1.29		9.4 / 0.27			0.1			112[e]	22	61	0	3		
12/7 1445	342	46	11.6	97	143	7.3 / 7.8	— / 1.16[c]		7.7 / 0.33		0.0 / 0.00	63 / 1.03		7.2 / 0.20			0.1			104[e]	22	58	6	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

DELTA CROSS CHANNEL NEAR WALNUT GROVE (STA. 98)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
1961	Tidal																									
1/9 0830		44	11.2	91	181	7.3 / 7.7	1.30[c]		11 / 0.48		0 / 0.00	82 / 1.34		7.5 / 0.21			0.1			120[e]	27	65	0	8	Median 96.	USGS
2/13 0950		52	8.9	80	106	7.1 / 7.4	0.92[c]		5.0 / 0.22		0 / 0.00	48 / 0.79		5.0 / 0.14			0.1			70[e]	19	46	7	145	Maximum 1300.	
3/6 0900		51	10.1	90	148	7.3 / 8.0	1.17[c]		7.4 / 0.32		0 / 0.00	76 / 1.25		3.6 / 0.10			0.1			98[e]	21	59	0	40	Minimum 2.3	
4/10 0930		58	9.2	90	135	7.4 / 7.8	1.11[c]		7.1 / 0.31		0 / 0.00	66 / 1.08		5.5 / 0.16			0.0			89[e]	22	55	1	15		
5/1 0825		64	8.5	89	159	7.4 / 7.8	12 / 0.60	6.2 / 0.51	11 / 0.48	1.5 / 0.04	0 / 0.00	72 / 1.18	8.8 / 0.18	7.3 / 0.21	0.0 / 0.00	0.1 / 0.01	0.0	19	Al 0.02 Fe 0.03[d] PO_4 0.25 ABS 0.0	101[f]	29	56	0	10		
6/5 0715		68	7.4	81	187	7.3 / 8.0	1.32[c]		13 / 0.57		0 / 0.00	84 / 1.38		7.6 / 0.21			0.1			124[e]	30	66	0	15		
7/10 0720		73	7.8	89	171	7.5 / 7.8	1.18[c]		12 / 0.52		0 / 0.00	75 / 1.23		9.5 / 0.27			0.1			113[e]	31	59	0	7		
8/8 1040		75	7.3	85	172	7.3 / 7.8	1.15[c]		13 / 0.57		0 / 0.00	78 / 1.28		8.8 / 0.25			0.0			114[e]	33	57	0	-		
9/7 1445		71	6.7	75	235	6.9 / 7.9	16 / 0.80	9.7 / 0.80	17 / 0.74	1.7 / 0.04	0 / 0.00	108 / 1.77	13 / 0.27	12 / 0.34	0.6 / 0.01	0.1 / 0.01	0.0	22	Cu 0.01 Zn 0.02 As 0.01 PO_4 0.45 ABS 0.1 [d]	145[f]	31	80	0	8		
10/4 0945		68	6.6	72	197	7.4 / 7.8	1.36[c]		14 / 0.61		0 / 0.00	91 / 1.49		10 / 0.28			0.1			130[e]	31	68	0	25		
11/8 0900		56	8.0	77	195	7.2 / 7.8	1.35[c]		13 / 0.57		0 / 0.00	88 / 1.44		7.6 / 0.21			0.1			129[e]	30	67	0	9		
12/11 0910		46	9.7	81	211	7.3 / 8.0	1.40[c]		15 / 0.65		0 / 0.00	83 / 1.36		10 / 0.28			0.0			139[e]	32	70	2	30		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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32505-D-H 6-61 200 SPO

TABLE C-2-4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

DELTA-MENDOTA CANAL NEAR MENDOTA (STA. 92)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/12 0815		44	12.6	102	954	8.2	—/4.28[c]		115/5.00		0.0/0.00	224/3.67		146/4.12			0.6			540	54	214	30	25	Median 23.	
2/16 0905		55	13.7	129	982	8.4	—/4.08[c]		112/4.87		4.0/0.13	132/2.16		146/4.12			0.6			556	54	204	89	15	Maximum 620.	
3/9 0830		52	10.8	98	1060	7.7	—/5.04[c]		109/4.74		0.0/0.00	120/1.97		178/5.02			0.4			601	48	252	154	60	Minimum 0.045	
4/13 0930		58	9.5	93	346	7.7	—/2.04[c]		32/1.39		0.0/0.00	84/1.38		42/1.13			0.2			196	41	102	33	20		
5/4 0750		63	9.1	94	268	7.6	19/0.95	8.4/0.69	22/0.96	1.1/0.04	0.0/0.00	74/1.21	27/0.56	28/0.79	0.8/0.01	0.3/0.02	0.1	19	Al 0.04, PO_4 0.15, Zn 0.01, ABS 0.0	162	36	82	21	150		
6/7 0700		70	7.6	85	255	8.1	—/1.56[c]		21/0.91		0.0/0.00	82/1.34		23/0.65			0.1			145	37	78	11	40		
7/13 0600		78	7.1	85	364	7.9	—/1.80[c]		33/1.44		0.0/0.00	90/1.43		49/1.38			0.1			208	44	90	16	85		
8/3 1737		77	7.4	89	702	7.9	—/2.42[c]		87/3.78		0.0/0.00	86/1.41		148/4.17			0.1			398	61	121	50	83		
9/6 1325		75	7.9	73	695	7.9	21/1.05	16/1.35	87/3.78	4.2/0.11	0.0/0.00	93/1.52	39/0.81	137/3.86	0.8/0.01	0.2/0.01	0.1	14	Al 0.06, Cu 0.01, Zn 0.02, PO_4 0.30, ABS 0.0	365	60	120	44	60		
10/9 1430		64	9.2	96	688	8.0	—/3.08[c]		77/3.35		0.0/0.00	125/2.05		119/3.36			0.2			390	52	154	52	30		
11/8 1120		69	9.5	106	743	8.3	—/3.45[c]		84/3.65		2/0.07	143/2.34		124/3.50			0.3			421	51	173	53	15		
12/5 0715		51	11.0	99	1000	8.1	—/4.68[c]		112/4.87		0.0/0.00	154/2.52		165/4.65			0.5			567	51	234	108	15		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

32505-D-H 6-61 200 SPO

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

DELTA-MENDOTA CANAL NEAR TRACY (STA. 93)

Date and time sampled P.S.T.	Discharge in cfs Daily Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 62.	USGS
1/9 1545	0	48	12.4	106	974	8.1 / 7.9	3.92[c]		126 / 5.48		0 / 0.00	159 / 2.61		166 / 4.68			0.9			548[e]	58	196	66	10	Maximum 620.	
2/14 0925	454	57	8.3	79	1,050	/ 7.9	3.88[c]		124 / 5.39		0 / 0.00	162 / 2.66		177 / 4.99			0.5			591[e]	58	194	61	10	Minimum 0.23	
3/6 1630	2,280	55	10.5	98	955	7.5 / 7.8	4.68[c]		91 / 3.96		0 / 0.00	108 / 1.77		156 / 4.40			0.5			538[e]	46	234	145	30		
4/10 1630	2,810	62	10.0	102	316	7.5 / 7.8	1.89[c]		28 / 1.22		0 / 0.00	81 / 1.33		31 / 1.07			0.1			178[e]	39	95	29	15		
5/1 1500	3,070	66	9.2	98	263	7.7 / 7.6	18 / 0.90	8.3 / 0.68	21 / 0.91	1.4 / 0.04	0 / 0.00	75 / 1.23	24 / 0.50	21 / 0.87	0.8 / 0.01	0.1 / 0.01	0.1	18	Al 0.03 ABS 0.0 PO_4 0.15[d]	160[f]	36	79	17	110		
6/5 1500	3,370	70	7.8	87	242	7.4 / 7.9	1.52[c]		19 / 0.83		0 / 0.00	80 / 1.31		23 / 0.65			0.1			136[e]	35	76	10	20		
7/10 1530	4,140	80	6.6	81	334	7.4 / 7.7	1.82[c]		29 / 1.26		0 / 0.00	89 / 1.46		44 / 1.24			0.1			188[e]	41	91	18	62		
8/3 1240	4,340	77	6.7	80	745	7.3 / 7.5	2.58[c]		96 / 4.18		0 / 0.00	83 / 1.36		168 / 4.74			0.1			419[e]	62	129	61	15		
9/11 1330	1,770	75	7.4	87	610	7.5 / 7.7	18 / 0.90	16 / 1.32	74 / 3.22	3.4 / 0.09	0 / 0.00	89 / 1.46	23 / 0.48	124 / 3.50	3.0 / 0.05	0.1 / 0.01	0.3	16	Cu 0.01 ABS 0.0 PO_4 0.20 Zn 0.03[d]	322[f]	58	111	38	35		
10/6 0845	2,020	70	6.9	77	447	7.4 / 7.8	2.08[c]		47 / 2.04		0 / 0.00	106 / 1.74		68 / 1.92			0.1			252[e]	50	104	17	30		
11/6 1500	678	59	11.6	115	1,040	8.2 / 7.9	4.74[c]		118 / 5.13		0 / 0.00	175 / 2.87		188 / 5.30			0.4			586[e]	52	237	93	25		
12/12 1415	248	48	8.0	69	1,150	8.1 / 7.6	5.26[c]		136 / 5.92		0 / 0.00	192 / 3.15		200 / 5.64			0.5			647[e]	53	263	106	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C-4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

DELTA-MENDOTA CANAL NEAR TRACY (STA. 93)

Date and time sampled P.S.T.	Discharge in cfs Daily Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/21-24, 26, 29-31	734				905	7.7	42 / 2.10	21 / 1.74	99 / 4.31	2.6 / 0.07	0 / 0.00	144 / 2.36	46 / 2.00	144 / 4.06	3.4 / 0.05	0.3 / 0.02	0.4	22	Fe 0.00	502[f] / 543[g]	52	192	74			
2/1-10	172				1,010	7.6	46 / 2.30	24 / 1.98	120 / 5.22	4.2 / 0.11	0 / 0.00	149 / 2.44	116 / 2.42	168 / 4.74	6.2 / 0.10	0.3 / 0.02	0.6	20	Fe 0.01	578[f] / 601[g]	54	214	92			
2/11-20	852				1,170	7.5	55 / 2.74	28 / 2.32	136 / 5.92	4.6 / 0.12	0 / 0.00	172 / 2.82	136 / 2.83	200 / 5.64	6.0 / 0.10	0.2 / 0.01	0.8	25	Fe 0.01	677[f] / 717[g]	53	253	112			
2/21-28	1,380				1,160	7.5	56 / 2.79	28 / 2.31	132 / 5.74	4.0 / 0.10	0 / 0.00	158 / 2.59	139 / 2.89	199 / 5.61	5.8 / 0.09	0.3 / 0.02	0.6	27	Fe 0.01	670[f] / 716[g]	52	255	125			
3/1-9	2,180				982	8.0	55 / 2.74	28 / 2.34	107 / 4.65	4.6 / 0.12	0 / 0.00	114 / 1.87	140 / 2.91	162 / 4.57	9.4 / 0.15	0.3 / 0.02	0.4	24	Fe 0.00	587[f] / 633[g]	47	254	161			
3/10-16, 18-19	2,340				657	8.0	40 / 2.00	19 / 1.60	64 / 2.78	3.1 / 0.08	0 / 0.00	96 / 1.57	85 / 1.77	104 / 2.93	6.8 / 0.11	0.3 / 0.02	0.3	24	Fe 0.00	394[f] / 422[g]	43	180	101			
3/20-26, 28-31	1,600				596	7.9	35 / 1.75	18 / 1.49	60 / 2.61	2.9 / 0.07	0 / 0.00	96 / 1.57	65 / 1.35	106 / 2.99	4.5 / 0.07	0.3 / 0.02	0.3	22	Fe 0.00	361[f] / 363[g]	44	162	83			
4/1-10	2,180				456	7.1	28 / 1.40	13 / 1.08	38 / 1.65	2.6 / 0.07	0 / 0.00	94 / 1.54	42 / 0.87	64 / 1.80	2.8 / 0.05	0.3 / 0.02	0.2	26	Fe 0.03	263[f] / 278[g]	39	124	47			
4/11-20	3,080				279	8.1	19 / 0.95	8.4 / 0.69	22 / 0.96	1.6 / 0.04	0 / 0.00	77 / 1.26	25 / 0.52	31 / 0.87	1.3 / 0.02	0.2 / 0.01	0.1	20	Fe 0.02	167[f] / 177[g]	36	82	19			
4/21-30	3,190				249	7.1	16 / 0.80	8.8 / 0.72	19 / 0.83	1.2 / 0.03	0 / 0.00	75 / 1.23	20 / 0.42	26 / 0.73	1.0 / 0.02	0.2 / 0.01	0.1	21	Fe 0.03	150[f] / 153[g]	35	76	14			
5/1-10	2,700				245	7.5	17 / 0.85	7.7 / 0.63	19 / 0.83	1.3 / 0.03	0 / 0.00	76 / 1.25	17 / 0.35	24 / 0.68	0.8 / 0.01	0.2 / 0.01	0.1	18	Fe 0.00	142[f] / 149[g]	35	74	12			
5/11-20	2,590				221	8.0	16 / 0.80	8.5 / 0.70	16 / 0.70	1.4 / 0.04	0 / 0.00	76 / 1.25	18 / 0.37	22 / 0.62	0.7 / 0.01	0.2 / 0.01	0.1	19	Fe 0.00	139[f] / 146[g]	31	75	13			
5/21-31	2,860				254	8.0	17 / 0.85	9.8 / 0.81	20 / 0.87	1.3 / 0.03	0 / 0.00	81 / 1.33	22 / 0.46	26 / 0.73	0.7 / 0.01	0.2 / 0.01	0.1	19	Fe 0.00	156[f] / 157[g]	34	83	17			
6/2-10	3,420				248	7.4	17 / 0.85	8.4 / 0.69	19 / 0.83	1.5 / 0.04	0 / 0.00	84 / 1.38	21 / 0.44	22 / 0.62	0.0 / 0.00	0.1 / 0.01	0.1	18	Fe 0.01	148[f] / 152[g]	34	77	8			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

DELTA-MENDOTA CANAL NEAR TRACY (STA. 93 CONTINUED)

Date and time sampled P.S.T.	Discharge in cfs Daily Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961 6/11-20	3,830				249	7.9	16 / 0.80	8.5 / 0.72	20 / 0.87	1.4 / 0.04	0 / 0.00	88 / 1.44	16 / 0.33	22 / 0.62	0.0 / 0.00	0.1 / 0.01	0.1	19	Fe 0.03	146[f] / 149[g]	36	76	4			USGS
6/21-28,30	4,270				263	8.1	16 / 0.80	9.5 / 0.79	21 / 0.91	1.4 / 0.04	0 / 0.00	89 / 1.46	19 / 0.40	25 / 0.70	0.0 / 0.00	0.1 / 0.01	0.1	18	Fe 0.04	154[f] / 161[g]	36	80	7			
7/1-10	3,980				317	7.9	17 / 0.85	11 / 0.87	30 / 1.30	1.7 / 0.04	0 / 0.00	92 / 1.51	28 / 0.58	38 / 1.07	0.9 / 0.01	0.1 / 0.01	0.1	25	Fe 0.04	197[f] / 199[g]	42	86	11			
7/11-16, 18-20	4,750				424	8.0	18 / 0.90	12 / 1.00	46 / 2.00	2.4 / 0.06	0 / 0.00	90 / 1.48	23 / 0.48	70 / 1.97	1.1 / 0.02	0.1 / 0.01	0.1	23	Fe 0.04	240[f] / 248[g]	51	95	21			
7/21-31	4,680				618	7.7	18 / 0.90	16 / 1.34	72 / 3.13	3.2 / 0.08	0 / 0.00	86 / 1.41	29 / 0.60	126 / 3.55	1.2 / 0.02	0.1 / 0.01	0.1	21	Fe 0.05	329[f] / 355[g]	57	112	41			
8/3-10	4,250				799	7.4	21 / 1.05	18 / 1.47	103 / 4.48	4.0 / 0.10	0 / 0.00	84 / 1.38	30 / 0.62	175 / 4.94	1.4 / 0.02	0.0 / 0.00	0.1	18	Fe 0.03	412[f] / 446[g]	63	126	57			
8/11-20	3,880				768	7.5	21 / 1.05	17 / 1.41	99 / 4.31	4.0 / 0.10	0 / 0.00	82 / 1.34	37 / 0.77	169 / 4.77	1.3 / 0.02	0.0 / 0.00	0.1	17	Fe 0.03	405[f] / 429[g]	63	123	56			
8/21-31	3,240				700	7.8	20 / 1.00	17 / 1.41	90 / 3.92	3.4 / 0.09	0 / 0.00	86 / 1.41	35 / 0.73	146 / 4.12	0.8 / 0.01	0.0 / 0.00	0.1	21	Fe 0.04	375[f] / 393[g]	61	120	49			
9/1-10	2,150				628	7.5	17 / 0.85	18 / 1.45	82 / 3.57	2.8 / 0.07	0 / 0.00	90 / 1.48	30 / 0.62	131 / 3.69	0.9 / 0.01	0.2 / 0.01	0.2	23	Fe 0.07	349[f] / 369[g]	60	115	41			
9/11-20	1,880				615	8.0	20 / 1.00	17 / 1.40	74 / 3.22	3.0 / 0.08	0 / 0.00	98 / 1.61	36 / 0.75	120 / 3.38	0.8 / 0.01	0.2 / 0.01	0.2	24	Fe 0.07	343[f] / 388[g]	56	120	40			
9/21-30	2,040				571	[illegible]	[illegible] / 1.10	16 / 1.30	65 / 2.83	2.9 / 0.07	0 / 0.00	108 / 1.77	35 / 0.73	105 / 2.96	0.7 / 0.01	0.2 / 0.01	0.3	19	Fe 0.07	319[f] / 349[g]	53	121	32			
10/1-15					554	[illegible]	24 / 1.20	16 / 1.30	61 / 2.65	2.4 / 0.06	0 / 0.00	116 / 1.90	33 / 0.69	90 / 2.54	1.1 / 0.02	0.2 / 0.01	0.1	20	Fe 0.04	305[f] / 320[g]	51	125	30			
10/16-18					[illegible]	[illegible]	4 / [illegible]	2[illegible] / [illegible]	[illegible] / 6.[illegible]	[illegible] / 0.[illegible]	[illegible] / 0.00	178 / 2.92	98 / 2.04	216 / 6.09	2.1 / 0.03	0.2 / 0.01	0.4	20	Fe 0.03	652[f] / 694[g]	53	26[illegible]	119			
10/19-31					809	[illegible]	35 / 1.90	21 / [illegible]	90 / [illegible]	2.[illegible] / 0.07	0 / 0.00	148 / 2.43	64 / 1.33	134 / 3.78	1.1 / 0.02	0.1 / 0.01	0.2	21	Fe 0.03	445[f] / 456[g]	51	182	61			
11/1-10	655				916	8.1	[illegible] / 2.10	[illegible] / 2.4[illegible]	103 / 4.48	3.4 / 0.09	0 / 0.00	168 / 2.75	74 / 1.54	159 / 4.49	3.1 / 0.05	0.3 / 0.02	0.3	24	Fe 0.04	522[f] / 551[g]	49	228	90			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C-4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

DELTA-MENDOTA CANAL NEAR TRACY (STA. 93 CONTINUED)

Date and time sampled P.S.T.	Discharge in cfs Daily Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
11/11-20	556				938	7.7	48 / 2.40	27 / 2.20	107 / 4.65	4.0 / 0.10	0 / 0.00	166 / 2.72	81 / 1.69	160 / 4.51	2.9 / 0.05	0.3 / 0.02	0.3	26	Fe 0.03	539[f] / 559[g]	50	230	94			
11/21-30	532				922	8.0	47 / 2.35	25 / 2.09	104 / 4.52	3.4 / 0.09	0 / 0.00	158 / 2.59	83 / 1.73	160 / 4.51	3.0 / 0.05	0.3 / 0.02	0.3	32	Fe 0.02	536[f] / 564[g]	50	222	92			
12/2,4-10	301				1,230	7.7	61 / 3.04	33 / 2.72	144 / 6.26	5.6 / 0.14	0 / 0.00	200 / 3.28	114 / 2.37	212 / 5.98	4.4 / 0.07	0.2 / 0.01	0.4	29	Fe 0.04	703[f] / 737[g]	51	288	124			
12/11-20	216				1,190	7.7	59 / 2.94	31 / 2.58	143 / 6.22	5.4 / 0.14	0 / 0.00	204 / 3.34	114 / 2.37	201 / 5.67	4.4 / 0.07	0.2 / 0.01	0.5	28	Fe 0.03	687[f] / 715[g]	52	276	109			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+5}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

DUTCH SLOUGH AT FARRAR PARK BRIDGE (STA. 108b)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million													Total[g] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
			ppm	%Sat			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents			Total ppm	N.C. ppm			
4/10 1325		62			213															192						USBR
5/11 0930		63			215															150						USBR
6/12 1440		70			312															166						USBR
7/17 1250		77			1304															776						USBR
8/14 1125		73			2073															1260						USBR
9/18 1055		68			876															500						USBR
10/16 1145		--			528															306						USBR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs. TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

ELDER CREEK AT GERBER (STA. 95a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1961																										
1/3 1405	9.8	46	11.7	98	462	7.9/8.0	3.92[c]		20/0.87		0.0/0.00	197/3.23		39/1.10			0.1			267[e]	18	196	34	100		USGS
2/16 1130	212	51	10.9	97	281	7.9/8.3	2.34[c]		9.2/0.40		1/0.03	142/2.33		8.5/0.24			0.0		Tot. Alk. 144	162[e]	15	117	0	30		
3/14 0940	39	54	11.0	102	380	7.9/8.5	3.40[c]		16/0.70		4/0.13	182/2.98		22/0.62			0.1		Tot. Alk. 190	219[e]	17	170	14	1		
4/11 1340	49	72	8.7	99	284	8.1/8.4	2.65[c]		11/0.48		5/0.17	141/2.31		14/0.39			0.1		Tot. Alk. 151	164[e]	15	133	9	10		
5/2 1400	39	71	8.5	96	339	8.0/8.4	30/1.50	19/1.58	14/0.61	0.8/0.02	5/0.17	163/2.67	12/0.25	19/0.54	0.0/0.00	0.1/0.01	0.0	17	Al 0.05 PO_4 0.10 ABS 0.1 Tot. Alk. 173 d	197[f]	16	154	12	5		
6/7 1420	12	84	7.9	101	394	8.0/8.5	3.80[c]		17/0.74		4/0.13	195/3.20		30/0.85			0.0		Tot. Alk. 203	227[e]	16	190	24	1		
7/7 0917		74	7.8	91	513	7.7/8.3	4.84[c]		20/0.87		5/0.17	264/4.33		31/0.87			0.1		Tot. Alk. 274	296[e]	15	242	17	10		
8/8 1150	DRY																									
9/6 1100	DRY																									
10/9 1535	DRY																									
11/9 1550	DRY																									
12/8 1105	7.0	48	11.0	95	519	7.9/8.3	4.28[c]		26/1.13		2/0.07	192/3.15		51/1.44			0.1		Tot. Alk. 196	299[e]	21	214	53	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

ELDER CREEK NEAR PASKENTA (STA. 13e)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										
1/2 1710	16.8	41	12.2	95	467	8.1/8.3	3.84[c]		23/1.00		2/0.07	194/3.18		40/1.13			0.0		Tot. Alk. 198	248[f]	21	192	30	5		USGS
2/15 1120	184	50	11.2	99	274	8.0/8.4	2.68[c]		8.5/0.37		2/0.07	158/2.59		6.5/0.18			0.0		Tot. Alk. 162	146[e]	12	134	1	10		
3/2 1620	86	58	10.6	103	349	7.9/8.6	3.27[c]		13/0.57		8/0.27	165/2.70		19/0.54			0.2		Tot. Alk. 181	186[e]	15	164	16	1		
4/10 1630	66	68	9.2	100	266	8.4+/8.6	2.54[c]		9.7/0.42		8/0.27	128/2.10		12/0.34			0.0		Tot. Alk. 144	142[e]	14	127	9	1		
5/1 1640	43	63	9.5	98	312	8.1/8.4	26/1.30	19/1.54	13/0.57	0.8/0.02	6/0.20	145/2.38	9.8/0.20	18/0.51	0.0/0.00	0.2/0.01	0.0	14	Al 0.06 Zn 0.03 PO_4 0.10 ABS 0.0 d Tot. Alk. 157	178[f]	17	142	13	0.9		
6/7 1245	16	80	7.1	88	387	8.4/8.5	3.28[c]		19/0.83		1/0.03	169/2.77		33/0.93			0.0		Tot. Alk. 171	206[e]	20	164	24	7		
7/5 1716	5.0	82	7.5	94	586	8.2/8.5	3.66[c]		45/1.96		6/0.20	148/2.43		102/2.88			0.1		Tot. Alk. 160	312[e]	35	183	52	1		
8/9 0820	3.7	74	7.7	90	803	7.9/8.2	4.33[c]		76/3.31		0.0/0.00	185/3.03		169/4.77			0.2			427[e]	43	216	64	15		
9/6 1000	0.8	71	8.4	94	1,250	8.1/8.3	49/2.45	39/3.21	127/5.52	1.8/0.05	3/0.10	147/2.41	8.0/0.17	308/8.69	0.4/0.01	0.0/0.00	0.2	14	Fe 0.01 Tot. Alk. 153 PO_4 0.05 d Zn 0.01 ABS 0.0	622[f]	49	283	58	10		
10/9 1420	1.1	70	7.0	78	1,360	7.5/8.5	6.28[c]		146/6.35		8/0.27	160/2.62		342/9.64			0.2		Tot. Alk. 176	724[e]	50	314	170	6		
11/16 1220	3.2	44	10.7	87	979	8.1/8.4	5.60[c]		90/3.92		8/0.27	224/3.67		200/5.69			0.1		Tot. Alk. 240	521[e]	41	280	83	1		
12/7 1130	19	41	12.2	95	566	7.9/8.3	4.56[c]		30/1.30		4/0.13	210/3.44		59/1.66			0.0		Tot. Alk. 218	301[e]	22	228	49	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FALSE RIVER AT WEEB PUMP (STA. 112a)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in ppm / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total[g] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
4/10 1440		62			169															242						USBR
5/11 1035		63			195															168						USBR
6/12 1330		72			219															154						USBR
7/17 1135		77			1055															612						USBR
8/14 1035		72			1190															712						USBR
9/18 0945		67			504															294						USBR
10/16 1030		--			398															240						USBR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO.5)

FEATHER RIVER AT NICOLAUS (STA. 20)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																									Median 36.	USGS
1/4 0925	2,730	41	11.4	89	113	7.1 / 7.7	— / 1.00[c]		5.0 / 0.22		0 / 0.00	60 / 0.98		1.0 / 0.03			0.0			74[e]	18	50	1	8	Maximum 7000.	
2/9 1437	5,200	50	11.2	98	99.6	7.3 / 7.7	— / 0.87[c]		3.4 / 0.15		0 / 0.00	52 / 0.85		0.9 / 0.03			0.0			65[e]	15	44	1	15	Minimum 0.45	
3/13 1430	4,440	54	10.9	101	104	7.3 / 7.8	— / 0.87[c]		3.7 / 0.16		0 / 0.00	53 / 0.87		1.0 / 0.03			0.1			68[e]	16	43	0	30		
4/5 1730	11,800	58	10.4	100	79	7.3 / 7.7	— / 0.71[c]		1.2 / 0.05		0 / 0.00	41 / 0.67		1.8 / 0.05			0.0			52[e]	6	35	1	9		
5/3 1330	4,750	64	9.5	99	84	7.3 / 7.8	9.6 / 0.48	2.8 / 0.23	4.0 / 0.17	0.7 / 0.02	0 / 0.00	43 / 0.70	4.4 / 0.09	2.6 / 0.07	0.0 / 0.00	0.0 / 0.00	0.0	13	Fe 0.02 Al 0.01 PO4 0.05 ABS 0.0 [d]	58[f]	19	36	1	7		
6/12 0730	1,960	70	8.8	98	95	7.4 / 7.8	— / 0.82[c]		3.1 / 0.13		0 / 0.00	54 / 0.89		0.7 / 0.02			0.0			62[e]	14	41	0	6		
7/6 1300	694	73	8.4	96	123	7.3 / 7.8	— / 1.12[c]		4.7 / 0.20		0 / 0.00	67 / 1.10		1.5 / 0.04			0.0			81[e]	15	56	1	7		
8/15 0800	722	74	7.3	85	125	7.6 / 8.1	— / 1.08[c]		4.9 / 0.21		0 / 0.00	71 / 1.16		2.8 / 0.08			0.1			82[e]	16	54	0	6		
9/11 1340	400 M.D.	80	8.1	100	151	7.6 / 7.9	15 / 0.75	6.7 / 0.55	5.3 / 0.23	1.4 / 0.04	0 / 0.00	82 / 1.34	4.0 / 0.08	4.0 / 0.11	0.0 / 0.00	0.1 / 0.01	0.0	15	Zn 0.01 PO4 0.25 ABS 0.0 [d]	92[f]	15	65	0	35		
10/4 1215	634	74	9.2	107	155	7.6 / 7.9	— / 1.32[c]		8.6 / 0.37		0 / 0.00	86 / 1.41		2.5 / 0.07			0.0			102[e]	22	66	0	10		
11/14 1300	927	53	11.0	101	149	7.6 / 8.0	— / 1.24[c]		5.3 / 0.23		0 / 0.00	82 / 1.34		2.0 / 0.06			0.1			98[e]	16	62	0	4		
12/12 1020	2,730	41	12.0	94	130	7.6 / 7.8	— / 1.10[c]		4.7 / 0.20		0 / 0.00	67 / 1.10		3.4 / 0.10			0.0			85[e]	15	55	0	2		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FEATHER RIVER AT NICOLAUS (STA. 20)

Date and time sampled P.S.T.	Discharge in cfs Average Daily Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids[g] in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/1-12	2,560				122	7.7	11 / 0.55	6.0 / 0.49	5.8 / 0.25		0 / 0.00	62 / 1.02								85	19	52	1			
1/19-31	2,680				129	7.6	12 / 0.60	5.8 / 0.48	5.7 / 0.25		0 / 0.00	61 / 1.00								83	19	54	4			
2/1-9	12,600				105	7.2	9.6 / 0.48	4.4 / 0.37	4.4 / 0.19		0 / 0.00	50 / 0.82								65	18	42	1			
2/10-18	16,100				100	7.0	10 / 0.50	4.1 / 0.34	3.9 / 0.17		0 / 0.00	49 / 0.80								73	17	42	2			
2/19-28	6,830				107	7.2	9.5 / 0.47	5.5 / 0.45	4.0 / 0.17		0 / 0.00	56 / 0.92								74	16	46	0			
3/1-10	4,000				112	6.7	12 / 0.60	3.9 / 0.32	4.3 / 0.19		0 / 0.00	56 / 0.92								78	17	46	0			
3/11-20	7,570				109	6.7	10 / 0.50	4.6 / 0.38	4.0 / 0.17		0 / 0.00	51 / 0.84								78	16	44	2			
3/21-31	11,700				110	6.7	11 / 0.55	4.5 / 0.37	4.0 / 0.17		0 / 0.00	52 / 0.85								80	16	46	3			
4/1-10	9,180				90	6.7	8.8 / 0.44	4.1 / 0.34	4.0 / 0.17		0 / 0.00	44 / 0.72								68	18	39	3			
4/11-14, 16-20	5,980				86	6.8	8.8 / 0.44	3.4 / 0.28	3.9 / 0.17		0 / 0.00	44 / 0.72								64	19	36	0			
4/21-29	4,110				92	7.0	9.6 / 0.48	3.9 / 0.32	4.0 / 0.17		0 / 0.00	46 / 0.75								74	18	40	2			
5/1-10	4,120				89	6.8	8.8 / 0.44	3.9 / 0.32	2.1 / 0.09		0 / 0.00	41 / 0.67								55	11	38	4			
5/11-21	5,440				82	6.8	8.8 / 0.44	3.9 / 0.32	2.0 / 0.09		0 / 0.00	39 / 0.64								65	11	38	6			
5/22-31	4,100				83	6.9	8.8 / 0.44	3.9 / 0.32	1.9 / 0.08		0 / 0.00	38 / 0.62								59	10	38	7			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FEATHER RIVER AT NICOLAUS (STA. 20 CONTINUED)

Date and time sampled P.S.T.	Discharge in cfs Average Daily Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[g]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
6/2-5	3,960				86	7.5	8.4 / 0.42	4.1 / 0.34	3.4 / 0.15		0 / 0.00	41 / 0.67								68	16	38	4			
6/6-18	1,960				101	7.6	10 / 0.50	4.1 / 0.34	4.2 / 0.18		0 / 0.00	50 / 0.82								71	18	42	1			
6/19-30	683				133	6.9	12 / 0.60	6.3 / 0.52	5.8 / 0.25		0 / 0.00	65 / 1.07								92	18	56	3			
7/1-12	702				132	7.0	12 / 0.60	6.3 / 0.52	5.2 / 0.23		0 / 0.00	68 / 1.11								90	17	56	0			
7/13-31	576				134	7.1	12 / 0.60	6.8 / 0.56	5.8 / 0.25		0 / 0.00	71 / 1.16								100	18	58	0			
8/1-31	671				133	7.5	13 / 0.65	5.7 / 0.47	5.3 / 0.23		0 / 0.00	70 / 1.15								85	17	56	0			
9/1-10	440				153	7.8	14 / 0.70	6.8 / 0.56	6.5 / 0.28		0 / 0.00	82 / 1.34								97	18	63	0			
9/11-20	520				162	7.3	14 / 0.70	7.5 / 0.62	7.0 / 0.30		0 / 0.00	83 / 1.36								104	19	66	0			
9/21-30	605				155	7.8	14 / 0.70	6.6 / 0.54	7.2 / 0.31		0 / 0.00	83 / 1.36								91	20	62	0			
10/1-31	544				159	8.0	15 / 0.75	7.4 / 0.61	6.4 / 0.28		0 / 0.00	86 / 1.41								103	17	68	0			
11/1-22	982				153	7.3	14 / 0.70	7.1 / 0.58	6.3 / 0.27		0 / 0.00	80 / 1.31								91	17	64	0			
11/23-30	1,850				137	7.9	14 / 0.70	5.6 / 0.46	4.9 / 0.21		0 / 0.00	74 / 1.21								83	15	58	0			
12/1-31	3,540				129	7.2	12 / 0.60	5.4 / 0.44	4.5 / 0.20		0 / 0.00	60 / 0.98								84	16	52	3			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FEATHER RIVER NEAR OROVILLE (STA. 19)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 6.2	USGS
1/13 1405	1,730	41	12.4	97	104	7.2 / 7.7	0.92[c]		4.4 / 0.19		0 / 0.00	64 / 1.05		0.8 / 0.02			0.0			73[e]	17	46	0	3	Maximum 2400.	
2/17 1040	5,000	45	11.2	92	88.7	7.3 / 8.0	0.75[c]		3.4 / 0.15		0 / 0.00	50 / 0.82		0.8 / 0.02			0.1			62[e]	17	38	0	10	Minimum 0.62	
3/10 1045	2,640	46	12.0	100	97	7.3 / 7.9	0.84[c]		4.4 / 0.19		0 / 0.00	51 / 0.84		2.4 / 0.07			0.0			68[e]	18	42	0	3		
4/13 1550	4,980	52	10.8	96	73	7.3 / 7.9	0.65[c]		3.7 / 0.16		0 / 0.00	41 / 0.67		2.0 / 0.06			0.0			51[e]	20	33	0	4		
5/12 0940	5,480	50	11.3	100	69	7.3 / 7.7	6.0 / 0.30	3.4 / 0.28	2.7 / 0.12	0.6 / 0.02	0 / 0.00	39 / 0.64	2.0 / 0.04	0.5 / 0.01	0.1 / 0.00	0.1 / 0.01	0.0	19	Fe 0.02 Al 0.04[d] PO_4 0.00 ABS 0.0	53[f]	17	29	0	5		
6/16 0700	2,620	68	8.7	95	99	7.3 / 7.6	0.84[c]		3.7 / 0.16		0 / 0.00	58 / 0.95		0.6 / 0.02			0.0			70[e]	16	42	0	5		
7/13 1630	2,520	73	8.4	96	105	7.3 / 8.0	0.92[c]		4.5 / 0.20		0 / 0.00	61 / 1.00		1.5 / 0.04			0.1			74[e]	18	46	0	2		
8/14 1215	2,540	64	8.1	84	111	7.6 / 7.8	0.96[c]		4.5 / 0.20		0 / 0.00	64 / 1.05		2.0 / 0.06			0.1			78[e]	17	48	0	3		
9/12 1000	1,290	67	8.9	96	128	7.6 / 8.0	12 / 0.60	5.6 / 0.46	5.3 / 0.23	1.4 / 0.04	0 / 0.00	74 / 1.21	3.0 / 0.06	3.5 / 0.10	0.2 / 0.00	0.1 / 0.01	0.0	12	PO_4 0.00 ABS 0.0[d]	79[f]	17	53	0	8		
10/4 1245	1,030	64	9.8	102	138	7.4 / 7.8	1.18[c]		6.0 / 0.26		0 / 0.00	78 / 1.28		1.0 / 0.03			0.1			97[e]	18	59	0	6		
11/15 1610	1,040	48	11.0	95	140	7.5 / 8.0	1.16[c]		5.6 / 0.24		0 / 0.00	80 / 1.31		2.2 / 0.06			0.1			99[e]	17	58	0	4		
12/13 1115	2,260	39	13.5	103	118	7.4 / 7.9	0.98[c]		4.4 / 0.19		0 / 0.00	67 / 1.10		2.8 / 0.08			0.1			83[e]	16	49	0	2		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FEATHER RIVER BELOW SHANGHAI BEND (STA. 20a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in ppm / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																									Median 96. Maximum > 7000. Minimum 2.3	USGS
1/4 1225	2480	41	11.8	92	116	7.1/7.7	1.00[c]		4.5/0.20		0/0.00	64/1.05		1.0/0.03			0.0			79[e]	17	50	0	3		
2/9 1356	4940	50	11.1	98	97.2	7.3/7.9	0.83[c]		3.4/0.15		0/0.00	52/0.85		1.2/0.03			0.0			66[e]	15	41	0	15		
3/13 1540	4410	52	11.2	101	99	7.3/7.8	0.81[c]		3.7/0.16		0/0.00	54/0.89		1.5/0.04			0.1			68[e]	16	41	0	9		
4/6 0845	10900	55	10.9	102	76	7.3/7.7	0.68[c]		1.4/0.06		0/0.00	40/0.66		2.0/0.06			0.0			52[e]	8	34	1	5		
5/3 1400	4820	60	9.9	99	82	7.3/7.8	9.2/0.46	2.9/0.24	26/0.11	0.4/0.01	0/0.00	43/0.70	3.2/0.07	2.1/0.06	0.0/0.00	0.0/0.00	0.0	14	Fe 0.02 Al 0.01[d] Cu 0.02 PO_4 0.05 ABS 0.0	55[f]	13	35	0	5		
6/12 0830	1770	70	8.7	97	95	7.4/7.8	0.82[c]		3.1/0.13		0/0.00	52/0.85		1.3/0.04			0.0			65[e]	14	41	0	10		
7/7 1000	895	76	8.5	100	120	7.5/7.8	1.04[c]		4.8/0.21		0/0.00	65/1.07		2.0/0.06			0.0			82[e]	17	52	0	9		
8/15 0845	889	76	7.3	86	126	7.4/7.9	1.06[c]		4.9/0.21		0/0.00	69/1.13		3.2/0.09			0.0			86[e]	17	53	0	6		
9/12 0800	558	74	7.6	88	154	7.4/7.8	18/0.90	4.9/0.40	5.4/0.23	1.2/0.03	0/0.00	82/1.34	6.0/0.12	4.8/0.14	0.3/0.00	0.1/0.01	0.0	17	AS 0.01 PO_4 0.10[d] ASB 0.0	98[f]	15	65	0	30		
10/4 1045	654	68	9.1	99	156	7.6/7.8	1.30[c]		5.9/0.26		0/0.00	86/1.41		2.2/0.06			0.0			106[e]	17	65	0	8		
11/14 1205	1080	52	10.8	97	148	7.6/8.0	1.24[c]		5.3/0.23		0/0.00	78/1.28		2.0/0.06			0.1			101[e]	16	62	0	5		
12/12 1445	2980	43	12.6	101	128	7.4/7.7	1.06[c]		4.7/0.20		0/0.00	69/1.13		3.2/0.09			0.1			87[e]	16	53	0	2		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE 3

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

FRESNO RIVER NEAR DAULTON (STA. 113)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/4 1025	14	38	13.1	98	205	7.6	0.98[c]		20 / 0.87		0.0 / 0.00	52 / 0.85		32 / 0.90			0.0			141	47	49	6	3	Median 6.2	
2/8 1145	30	57	10.4	100	168	7.8	0.84[c]		15 / 0.65		0.0 / 0.00	53 / 0.87		23 / 0.65			0.1			116	44	42	0	2	Maximum 62.	
3/3 0850	31	50	10.8	95	162	7.9	0.78[c]		17 / 0.74		0.0 / 0.00	53 / 0.87		21 / 0.59			0.0			112	49	39	0	0	Minimum 0.23	
4/5 0830	54	62	9.1	93	100	7.8	0.56[c]		10 / 0.44		0.0 / 0.00	46 / 0.75		8.7 / 0.25			0.0			69	44	28	0	10		
5/10 1045	48	65	8.8	93	92	7.5	6.8 / 0.34	2.2 / 0.18	9.1 / 0.40	0.9 / 0.02	0.0 / 0.00	36 / 0.59	0.0 / 0.00	11 / 0.31	0.1 / 0.00	0.1 / 0.01	0.1	20	Al 0.01, PO_4 0.00, ABS 0.0	68	43	26	0	35		
6/5 1510	29.6	87	6.9	91	106	7.7	0.65[c]		11 / 0.48		0.0 / 0.00	37 / 0.61		12 / 0.34			0.0			73	42	33	3	3		
7/11 1430	NO FLOW	95	6.7	94	259	8.0	1.08[c]		28 / 1.22		0.0 / 0.00	53 / 0.87		52 / 1.47			0.1			178	53	54	11	2		
8	DRY																									
9	DRY																									
10	DRY																									
11/6 1330	NO FLOW	64	9.5	99	548	7.9	2.11[c]		61 / 2.65		0.0 / 0.00	72 / 1.18		120 / 3.39			0.1			377	56	106	47	5		
12/7 0930		48	10.9	94	263	7.8	1.16[c]		28 / 1.22		0.0 / 0.00	53 / 0.87		48 / 1.35			0.1			181	51	58	15	13		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

GRANT LINE CANAL AT TRACY ROAD BRIDGE (STA. 103a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961	Tidal																								Median 23. Maximum 620. Minimum 0.62	USGS
1/13 0830		48	9.1	78	836	7.3 / 7.8	3.74[c]		78 / 3.39		0 / 0.00	130 / 2.13		145 / 4.09			0.3			487[e]	48	187	80	12		
2/17 1035		56	11.5	109	1,110	7.5 / 7.9	4.72[c]		129 / 5.61		0 / 0.00	169 / 2.77		208 / 5.87			0.5			646[e]	54	236	97	7		
3/7 0740		52	11.4	103	1,060	7.9 / 8.1	4.66[c]		111 / 4.83		0 / 0.00	158 / 2.59		196 / 5.53			0.4			617[e]	51	233	103	11		
4/11 0800		64	8.4	87	1,250	8.1 / 7.9	5.57[c]		143 / 6.22		0 / 0.00	172 / 2.82		252 / 7.11			0.4			727[e]	53	278	137	20		
5/1 1620		68	10.8	118	1,000	8.5 / 8.0	50 / 2.50	23 / 1.90	119 / 5.18	5.4 / 0.14	0 / 0.00	163 / 2.67	69 / 1.44	185 / 5.22	0.7 / 0.01	0.2 / 0.01	0.3		Al 0.01 Fe 0.04 [d] PO_4 0.55 ABS 0.2	534[f]	53	220	86	15		
6/6 0630		68	7.9	86	1,160	8.4 / 7.8	5.44[c]		128 / 5.57		0 / 0.00	208 / 3.41		218 / 6.15			0.4			675[e]	51	272	101	15		
7/11 0530		78	6.7	81	380	7.7 / 7.7	2.00[c]		35 / 1.52		0 / 0.00	98 / 1.61		52 / 1.47			0.1			221[e]	43	100	20	47		
8/9 1320		80	7.5	92	645	7.6 / 7.7	2.60[c]		74 / 3.22		0 / 0.00	101 / 1.66		127 / 3.58			0.1			375[e]	55	130	47	-		
9/7 1050		73	8.2	94	1,140	7.7 / 7.8	54 / 2.69	28 / 2.27	132 / 5.74	5.0 / 0.13	0 / 0.00	163 / 2.67	62 / 1.29	232 / 6.54	0.1 / 0.00	0.1 / 0.01	0.2	1.0	Al 0.04 Cu 0.01 [d] Zn 0.03 PO_4 0.30 ABS 0.0	594[f]	53	248	114	30		
10/9 1320		64	8.7	91	1,570	7.7 / 7.9	6.16[c]		174 / 7.57		0 / 0.00	196 / 3.21		292 / 8.23			0.5			914[e]	55	308	147	30		
11/13 1455		56	12.6	120	982	7.6 / 7.9	4.40[c]		113 / 4.92		0 / 0.00	156 / 2.56		171 / 4.82			0.2			572[e]	53	220	92	7		
12/12 1040		46	10.4	87	1,040	7.6 / 7.9	4.76[c]		118 / 5.13		0 / 0.00	186 / 3.05		174 / 4.91			0.5			605[e]	52	238	85	13		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

INDIAN CREEK NEAR CRESCENT MILLS (STA. 174)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 23. Maximum 7000. Minimum 0.23	USGS
1/13 1200	90	36	10.9	79	160	7.1/7.9	1.42[c]		8.4/0.37		0/0.00	96/1.57		2.8/0.08			0.0			109[e]	21	71	0	7		
2/17 0850	402	38	9.8	73	123	7.0/7.9	0.99[c]		5.9/0.26		0/0.00	67/1.10		0.4/0.01			0.0			84[e]	21	49	0	30		
3/10 0810	267	41	10.3	81	137	7.1/7.7	1.10[c]		7.0/0.30		0/0.00	73/1.20		4.2/0.12			0.0			93[e]	21	55	0	4		
4/13 1230	402	49	10.2	89	99	7.2/7.6	0.88[c]		7.8/0.34		0/0.00	55/0.90		1.9/0.05			0.0			67[e]	28	44	0	7		
5/12 0705	437	44	10.0	82	100	7.1/7.4	9.6/0.48	4.4/0.36	3.7/0.16	0.7/0.02	0/0.00	56/0.92	3.0/0.06	2.2/0.06	0.2/0.00	0.1/0.01	0.0	25	Fe 0.04 Zn 0.03[d] Al 0.10 PO_4 0.05 ABS 0.0	77[f]	16	42	0	6		
6/15 1530	95	82	7.2	91	148	7.1/7.3	1.21[c]		6.9/0.30		0/0.00	86/1.41		0.9/0.03			0.0			101[e]	20	61	0	9		
7/13 1400	11	78	7.5	90	253	7.2/7.8	2.08[c]		14/0.61		0/0.00	144/2.36		5.0/0.14			0.0			172[e]	23	104	0	3		
8/3 0630	7.0	58	6.0	58	375	6.8/7.9	2.94[c]		21/0.91		0/0.00	207/3.39		14/0.39			0.3			255[e]	24	147	0	8		
9/6 0920	6.8	54	7.6	70	280	/8.2	30/1.50	9.5/0.78	17/0.74	1.4/0.04	0/0.00	160/2.62	10/0.21	8.5/0.24	0.3/0.00	0.1/0.01	0.1	31	PO_4 0.15 ABS 0.0[d]	187[f]	24	114	0	45		
10/4 0840	15	53	7.9	72	201	7.1/7.8	1.64[c]		9.7/0.42		0/0.00	114/1.87		1.0/0.03			0.1			137[e]	20	82	0	6		
11/15 1430	50	44	10.7	87	187	7.2/8.2	1.52[c]		9.6/0.42		0/0.00	101/1.66		4.0/0.11			0.1			127[e]	22	76	0	4		
12/7 1520	87	42	10.2	81	174	7.2/8.1	1.40[c]		9.6/0.42		0/0.00	91/1.49		9.6/0.15			0.0			118[e]	23	70	0	7		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

INDIAN SLOUGH NEAR BRENTWOOD (STA. 107)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961	Tidal																								Median 18.	USGS
1/10 0750		53	10.2	93	1,360	7.9 / 8.1	7.00[c]		174 / 7.57		0 / 0.00	358 / 5.87		195 / 5.50			2.5			758[e]	52	350	57	13	Maximum >7000.	
2/14 0735		55	8.3	78	1,420	7.5 / 7.9	7.34[c]		155 / 6.74		0 / 0.00	321 / 5.26		225 / 6.34			2.2			790[e]	48	367	104	13	Minimum 1.3	
3/6 1515		54	10.0	93	1,570	8.1 / 8.4	7.18[c]		185 / 8.05		5 / 0.17	295 / 4.84		230 / 6.49			2.5			875[e]	53	359	109	45		
4/10 1545		64	8.4	88	346	7.3 / 7.9	2.07[c]		34 / 1.48		0 / 0.00	92 / 1.51		40 / 1.13			0.3			193[e]	42	103	28	45		
5/1 1430		67	7.5	81	269	7.5 / 8.1	17 / 0.85	9.8 / 0.81	23 / 1.00	1.4 / 0.04	0 / 0.00	88 / 1.44	22 / 0.46	26 / 0.73	0.6 / 0.01	0.3 / 0.02	0.2	18	Al 0.01 Fe 0.14[d] PO_4 0.15 ABS 0.0	161[f]	37	83	11	50		
6/5 1330		73	7.0	80	285	7.4 / 8.0	1.76[c]		26 / 1.13		0 / 0.00	92 / 1.51		26 / 0.73			0.2			158[e]	39	88	13	30		
7/10 1330		82	6.2	78	512	7.6 / 8.2	2.52[c]		53 / 2.31		0 / 0.00	121 / 1.98		76 / 2.14			0.4			284[e]	48	126	27	51		
8-3 1005		77	6.1	73	968	7.4 / 7.5	3.28[c]		127 / 5.52		0 / 0.00	105 / 1.72		218 / 6.15			0.5			539[e]	63	164	78	20		
9/11 1115		73	6.7	78	852	7.4 / 8.0	22 / 1.10	24 / 1.94	104 / 4.52	4.2 / 0.11	0 / 0.00	115 / 1.88	48 / 1.00	173 / 4.88	1.9 / 0.03	0.2 / 0.01	0.4	17	PO_4 0.20[d] Cu 0.01 Zn 0.07 ABS 0.0	475[f]	60	152	58	40		
10/6 1045		71	7.2	81	648	7.5 / 7.9	2.82[c]		77 / 3.35		0 / 0.00	144 / 2.36		101 / 2.85			0.5			361[e]	54	141	23	35		
11/6 1200		57	7.8	76	780	7.5 / 8.0	3.38[c]		97 / 4.22		0 / 0.00	179 / 2.93		108 / 3.09			1.0			434[e]	56	169	22	20		
12/13 0940		46	10.7	90	1,310	7.9 / 8.2	7.32[c]		141 / 6.13		0 / 0.00	340 / 5.57		173 / 4.88			2.2			730[e]	46	366	87	12		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

ITALIAN SLOUGH NEAR MOUTH (STA. 106)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961	Tidal																								Median 6.2	USGS
1/9 1435		46	9.1	76	863	7.1/7.5	4.00[c]		77/3.35		0/0.00	116/1.90		156/4.40			0.5			493[e]	46	200	105	5	Maximum 230	
2/13 1620		56	7.6	72	1,040	7.5/7.4	4.12[c]		118/5.13		0/0.00	130/2.13		198/5.58			1.0			594[e]	55	206	99	3	Minimum 0.5	
3/7 0910		54	11.5	97	1,130	7.9/8.0	4.66[c]		141/6.13		0/0.00	147/2.41		204/5.75			1.1			645[e]	57	233	112	30		
4/11 0945		64	13.3	138	463	8.3/8.0	2.47[c]		42/1.83		0/0.00	87/1.43		65/1.83			0.3			264[e]	43	124	53	20		
5/2 0900		65	7.8	82	226	7.5/7.8	17/0.85	7.4/0.61	20/0.87	1.5/0.04	0/0.00	77/1.26	19/0.40	22/0.62	0.0/0.00	0.1/0.01	0.0	16	PO_4 0.10 d; Fe 0.05; ABS 0.0	141[f]	37	73	10	20		
6/5 1415		70	7.9	87	233	7.5/7.9	1.52[c]		19/0.83		0/0.00	80/1.31		20/0.56			0.1			133[e]	35	76	10	25		
7/10 1415		82	7.3	92	330	7.7/7.9	1.70[c]		32/1.39		0/0.00	89/1.46		44/1.24			0.1			188[e]	45	85	12	23		
8/3 1130		80	7.0	86	805	7.5/7.7	2.61[c]		104/4.52		0/0.00	95/1.56		186/5.25			0.0			460[e]	63	130	52	-		
9/11 1215		73	7.5	87	638	7.5/7.8	18/0.90	17/1.36	78/3.39	3.4/0.09	0/0.00	87/1.43	24/0.50	132/3.72	0.6/0.01	0.2/0.01	0.1	16	Al 0.01; PO_4 0.30; Cu 0.01; Zn 0.05; ABS 0.0	364[f]	59	113	42	35		
10/6 1015		71	6.7	75	452	7.3/7.7	1.94[c]		48/2.09		0/0.00	101/1.66		72/2.03			0.2			258[e]	52	97	14	40		
11/6 1315		59	8.0	80	459	7.5/8.0	2.22[c]		50/2.18		0/0.00	111/1.82		66/1.86			0.1			262[e]	50	111	20	15		
12/12 1325		48	8.0	69	799	7.5/7.9	3.64[c]		92/4.00		0/0.00	144/2.36		135/3.81			0.4			456[e]	52	182	64	15		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

KAWEAH RIVER BELOW TERMINOUS DAM (STA. 35)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/4 1400	65	42	12.7	100	136	8.0	1.06[c]		8.0 / 0.35		0.0 / 0.00	71 / 1.16		5.0 / 0.14			0.0			90	25	53	0	3	Median 2.3	
2/7 1100	92	50	8.8	78	166	7.8	1.38[c]		6.6 / 0.29		0.0 / 0.00	86 / 1.41		4.2 / 0.12			0.1			110	17	69	0	3	Maximum 230.	
3/2 0930	83	50	11.8	104	123	7.9	0.94[c]		6.2 / 0.27		0.0 / 0.00	64 / 1.05		5.0 / 0.14			0.0			81	22	47	0	1	Minimum 0.06	
4/4 1145	602	64	9.6	100	57	7.6	0.42[c]		5.1 / 0.13		0.0 / 0.00	31 / 0.51		1.5 / 0.04			0.1			38	24	21	0	3		
5/9 1200	530	61	9.6	97	48	7.5	6.2 / 0.31	0.7 / 0.06	2.9 / 0.13	0.6 / 0.02	0.0 / 0.00	23 / 0.38	1.0 / 0.02	1.9 / 0.05	0.2 / 0.00	0.0 / 0.00	0.0	7.9	Fe 0.01, Al 0.01, Zn 0.03, PO_4 0.00 ABS 0.0	32	25	18	0	1		
6/6 0750	518	65	9.2	97	46	7.4	5.8 / 0.29	1.0 / 0.08	2.1 / 0.09		0.0 / 0.00	25 / 0.41		1.3 / 0.04			0.1			30	20	18	0	1		
7/11 1030	53	81	8.1	101	102	7.9	0.81[c]		5.0 / 0.22		0.0 / 0.00	50 / 0.82		4.6 / 0.13			0.0			67	21	40	0	3		
8/2 1440	29	79	9.1	94	130	8.1	1.00[c]		7.2 / 0.31		0.0 / 0.00	61 / 1.00		8.0 / 0.23			0.0			86	24	50	0	4		
9/5 1325	34	79	10.1	124	119	8.4	16 / 0.80	1.5 / 0.12	5.8 / 0.25	1.6 / 0.04	2 / 0.07	55 / 0.90	2.8 / 0.06	6.0 / 0.17	2.5 / 0.04	0.2 / 0.01	0.0	8.0	ABS 0.0, PO_4 0.10, Total alkalinity 59	73	21	46	0	2		
10/10 1440	22	64	11.2	116	156	8.2	1.22[c]		8.7 / 0.38		0.0 / 0.00	71 / 1.16		9.8 / 0.28			0.1			103	24	61	3	10		
11/7 1145	22	53	11.3	104	163	7.9	1.20[c]		10 / 0.44		0.0 / 0.00	73 / 1.20		10 / 0.28			0.2			108	27	60	0	1		
12/4 1430		53	10.8	99	139	7.5	1.08[c]		8.4 / 0.37		0.0 / 0.00	61 / 1.00		7.0 / 0.20			0.1			92	26	54	4	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

KERN RIVER NEAR BAKERSFIELD (STA. 36)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/5 0830	175	41	11.7	91	233	8.1	1.26[c]		24 / 1.04		0.0 / 0.00	96 / 1.57		9.8 / 0.28			0.2			150	45	63	0	3	Median 6.2	
2/7 1630	205	55	9.1	86	234	7.9	1.24[c]		25 / 1.09		0.0 / 0.00	94 / 1.54		10 / 0.28			0.3			150	47	62	0	6	Maximum 620	
3/2 1330	164	57	12.6	121	232	7.5	1.23[c]		25 / 1.09		0.0 / 0.00	125 / 2.05		9.8 / 0.28			0.2			149	47	62	0	4	Minimum 0.045	
4/4 1500	242	70	10.6	118	194	8.1	1.06[c]		19 / 0.83		0.0 / 0.00	82 / 1.34		8.5 / 0.24			0.3			125	44	53	0	5		
5/10 0700	283	63	8.1	84	138	7.9	12 / 0.60	1.9 / 0.16	13 / 0.57	1.3 / 0.03	0.0 / 0.00	54 / 0.89	12 / 0.25	6.5 / 0.18	0.2 / 0.00	0.0 / 0.00	0.1	13	Fe 0.01, Zn 0.02, PO_4 0.00, ABS 0.0	87	42	38	0	7		
6/6 1225	261	75	9.2	108	137	7.8	12 / 0.60	24 / 0.20	13 / 0.57		0.0 / 0.00	60 / 0.98		5.2 / 0.15			0.1			88	42	40	0	2		DWR
7/11 0800	386	78	7.1	85	220	8.0	1.20[c]		24 / 1.04		0.0 / 0.00	100 / 1.64		9.5 / 0.27			0.2			142	46	60	0	5		
8/2 1200	375	76	9.0	107	252	7.9	1.40[c]		26 / 1.13		0.0 / 0.00	112 / 1.84		12 / 0.34			0.2			162	45	70	0	5		
9/5 1125	290	73	6.9	79	221	8.0	19 / 0.95	3.2 / 0.26	22 / 0.96	2.4 / 0.06	0.0 / 0.00	98 / 1.61	14 / 0.29	10 / 0.28	0.0 / 0.00	0.4 / 0.02	0.1	14	AL 0.25, Zn 0.02, PO_4 0.60, ABS 0.0	133	43	61	0	20		
10/10 1203	104	64	10.1	115	277	7.9	1.54[c]		28 / 1.22		0.0 / 0.00	107 / 1.75		14 / 0.39			0.3			178	44	77	0	10		
11/7 0945	133	67	10.6	116	268	7.8	1.44[c]		28 / 1.22		0.0 / 0.00	107 / 1.75		14 / 0.39			0.3			172	46	72	0	5		
12/4 1115	270	51	11.5	104	240	7.7	1.40[c]		24 / 1.04	0.00	0.0 / 0.00	100 / 1.64		12 / 0.34			0.2			154	43	70	0	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

KERN RIVER BELOW ISABELLA DAM (STA. 36a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/3 1100	16	46	10.6	88	308	7.0	___ / 1.84[c]		26 / 1.13		0.0 / 0.00	145 / 2.38		9.5 / 0.27			0.2			195	38	92	0	4	Median 0.6	
2/6 1030	21	46	10.8	90	321	7.8	___ / 1.92[c]		34 / 1.48		0.0 / 0.00	150 / 2.46		13 / 0.37			0.3			203	44	96	0	6	Maximum 620.	
3/1 1100	15	50	10.3	91	335	7.1	___ / 2.04[c]		30 / 1.30		0.0 / 0.00	184 / 3.02		11 / 0.31			0.3			212	39	102	0	3	Minimum 0.045	
4/5 1525	8	65	8.6	91	335	7.4	___ / 2.02[c]		32 / 1.39		0.0 / 0.00	155 / 2.54		15 / 0.42			0.5			212	41	101	0	6		
5/1 0915	6	57	9.4	90	314	7.6	28 / 1.40	4.9 / 0.40	28 / 1.22	2.7 / 0.07	0.0 / 0.00	143 / 2.34	22 / 0.46	14 / 0.39	0.9 / 0.01	0.0 / 0.00	0.2	2.9	Al 0.04, Zn 0.06, PO_4 0.10, ABS 0.0	174	39	90	0	7		
6/6 1030	6	64	8.7	91	278	7.5	24 / 1.20	5.5 / 0.45	26 / 1.13		0.0 / 0.00	125 / 2.05		10 / 0.28			0.4			176	41	83	0	3		
7/3 1300	256	69	8.1	90	254	7.5	___ / 1.46[c]		25 / 1.09		0.0 / 0.00	119 / 1.95		10 / 0.28			0.3			160	43	73	0	4		
8/1 0945	284	73	7.9	90	273	7.4	___ / 1.61[c]		25 / 1.09		0.0 / 0.00	126 / 2.07		10 / 0.28			0.1			172	40	81	0	3		
9/1 0900	115	73	6.1	70	281	7.5	26 / 1.30	5.0 / 0.41	28 / 1.22	3.1 / 0.08	0.0 / 0.00	414 / 2.31	15 / 0.31	12 / 0.34	0.3 / 0.00	0.5 / 0.03	0.2	16	Al 0.06, As 0.02, PO_4 0.80, ABS 0.0	175	41	85	0	4		
10/2 1050	9	70	7.4	82	329	7.6	___ / 2.08[c]		33 / 1.44		0.0 / 0.00	156 / 2.56		13 / 0.37			0.0			208	41	104	0	5		
11/1 1130	16	56	9.1	87	371	7.6	___ / 2.22[c]		36 / 1.57		0.0 / 0.00	175 / 2.87		14 / 0.39			0.4			234	41	111	0	3		
12/19 1120	21	50	10.1	90	375	8.4	___ / 2.29[c]		36 / 1.57		3 / 0.10	176 / 2.88		17 / 0.48			0.4			237	41	115	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

KERN RIVER NEAR KERNVILLE (STA. 36b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/3 1015	140	36	12.4	90	181	7.5	1.04[c]		17/0.74		0.0/0.00	82/1.34		6.0/0.17			0.1			126	42	52	0	3	Median 23.	
2/6 0950	180	42	11.3	89	182	7.8	1.04[c]		12/0.52		0.0/0.00	82/1.34		7.8/0.22			0.1			127	33	52	0	3	Maximum 620.	
3/1 1040	160	47	10.7	91	181	7.1	0.97[c]		18/0.78		0.0/0.00	98/1.61		6.9/0.19			0.1			126	45	48	0	2	Minimum 0.23	
4/5 1405	460	60	9.0	90	116	7.2	0.64[c]		11/0.48		0.0/0.00	54/0.89		3.5/0.10			0.3			81	43	32	0	3		
5/1 0845	30	56	9.5	90	109	7.3	9.6/0.48	1.3/0.11	9.9/0.43	1.1/0.03	0.0/0.00	49/0.80	7.0/0.15	5.0/0.14	0.0/0.00	0.0/0.00	0.0	14	Fe 0.01, Al 0.02, Zn 0.08, PO_4 0.00 ABS 0.1	72	41	30	0	1		
6/6 0930	495	61	8.9	90	80	7.2	6.6/0.33	1.5/0.12	8.0/0.35		0.0/0.00	34/0.56		2.9/0.08			0.1			56	44	23	0	4		
7/3 1200	155	69	8.3	92	118	7.2	0.70[c]		12/0.52		0.0/0.00	52/0.85		5.8/0.16			0.1			82	43	35	0	3		
8/1 0845		69	7.7	85	156	7.4	0.85[c]		16/0.70		0.0/0.00	66/1.08		7.6/0.21			0.1			109	45	42	0	3		
9/1 0800		64	7.8	82	129	7.7	11/0.55	1.8/0.15	13/0.57	1.5/0.04	0.0/0.00	57/0.93	8.6/0.18	5.9/0.17	0.0/0.00	0.3/0.02	0.1	13	Al 0.06, As 0.01, PO_4 0.25, ABS 0.0	83	44	35	0	85		
10/2 1015	87	62	8.5	87	186	7.6	1.00[c]		21/0.91		0.0/0.00	80/1.31		9.0/0.25			0.0			129	48	50	0	7		
11/1 1100	103	45	10.8	90	204	7.9	1.08[c]		20/0.87		0.0/0.00	91/1.49		9.0/0.25			0.2			142	45	54	0	3		
12/1 1000		43	11.3	91	188	7.7	1.03[c]		18/0.78		0.0/0.00	84/1.38		9.4/0.27			0.2			131	43	52	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

KINGS RIVER BELOW NORTH FORK (STA. 33c)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/13 1145	223	37	10.7	74	59.6	7.0	0.38[c]		4.1 / 0.18		0.0 / 0.00	31 / 0.51		0.8 / 0.02			0.0			43	32	19	0	3	Median 13.	
2/1 1100	256	46	10.8	90	58.9	7.1	0.40[c]		4.7 / 0.20		0.0 / 0.00	24 / 0.39		2.0 / 0.06			0.1			43	33	20	0	3	Maximum 500.	
2/28 1110	259	47	10.8	92	56	7.4	0.40[c]		3.7 / 0.16		0.0 / 0.00	26 / 0.43		1.4 / 0.04			0.0			41	29	20	0	2	Minimum 0.23	
4/3 1045	1202	64	10.3	108	50	7.2	0.40[c]		2.8 / 0.12		0.0 / 0.00	23 / 0.38		2.5 / 0.07			0.0			36	23	20	1	2		
5/1 1005	1860	58	9.7	94	30	6.8	2.9 / 0.14	0.4 / 0.03	1.9 / 0.08	0.6 / 0.02	0.0 / 0.00	10 / 0.16	2.0 / 0.04	1.5 / 0.04	0.2 / 0.00	0.0 / 0.00	0.0	6.8	Fe 0.01, Cu 0.01, Al 0.04, Zn 0.04, PO_4 0.00, ABS 0.0	21	30	8	0	1		
6/5 1105	2085	60	8.2	82	23	6.6	2.1 / 0.10	0.7 / 0.06	1.5 / 0.07		0.0 / 0.00	12 / 0.20		0.6 / 0.02			0.0			17	30	8	0	4		
7/10 1040	353	74	10.2	118	38	7.1	0.26[c]		2.2 / 0.10		0.0 / 0.00	18 / 0.30		2.0 / 0.06			0.0			27	28	13	0	4		
8/7 1130	1122	64	8.0	84	33	6.8	0.21[c]		2.2 / 0.10		0.0 / 0.00	19 / 0.31		0.2 / 0.01			0.0			24	32	11	0	4		
9/5 1045	225	68	10.5	116	48	7.6	5.3 / 0.26	0.5 / 0.04	2.9 / 0.13	0.9 / 0.02	0.0 / 0.00	22 / 0.36	1.0 / 0.02	1.7 / 0.05	0.1 / 0.00	0.2 / 0.01	0.0	7.6	Al 0.09, PO_4 0.05 ABS 0.0	31	29	15	0	3		
10/2 1200	131	70	10.2	114	59	7.0	0.36[c]		3.1 / 0.13		0.0 / 0.00	24 / 0.39		2.5 / 0.07			0.0			43	27	18	0	5		
11/6 1120	146	54	10.7	100	70	7.4	0.42[c]		5.3 / 0.23		0.0 / 0.00	24 / 0.39		3.5 / 0.10			0.1			50	35	21	1	4		
12/4 1115	385	45	10.5	96	66	6.8	0.48[c]		3.5 / 0.15		0.0 / 0.00	24 / 0.39		3.0 / 0.08			0.0			48	24	24	4	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

KINGS RIVER BELOW PEOPLES WEIR (STA. 34)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/4 1250	15	43	11.9	95	214	8.1	1.58[c]		13 / 0.57		0.0 / 0.00	114 / 1.87		4.5 / 0.13			0.0			147	27	79	0	3	Median 23.	
2/7 0920	17	55	10.0	94	207	8.1	1.48[c]		13 / 0.57		0.0 / 0.00	103 / 1.69		5.8 / 0.16			0.0			142	28	74	0	4	Maximum 2400.	
3/2 0800	228	56	9.6	91	75	7.5	0.58[c]		3.8 / 0.17		0.0 / 0.00	36 / 0.59		1.4 / 0.04			0.0			52	23	29	0	3	Minimum 0.06	
4/4 1030	102	72	8.0	91	119	7.8	0.91[c]		4.6 / 0.20		0.0 / 0.00	57 / 0.93		5.2 / 0.15			0.0			82	18	46	0	1		
5/9 0825	37	71	8.5	96	139	8.0	13 / 0.65	4.0 / 0.33	9.3 / 0.40	1.3 / 0.03	0.0 / 0.00	67 / 1.10	7.0 / 0.15	5.8 / 0.16	0.9 / 0.01	0.0 / 0.00	0.0	13	Fe 0.02, Cu 0.01, Zn 0.03, ABS 0.1, PO_4 0.05	87	28	49	0	1		
6/6 0630	26	75	7.0	81	144	7.8	13 / 0.65	4.4 / 0.36	9.9 / 0.43		0.0 / 0.00	72 / 1.18		4.5 / 0.13			0.1			99	30	51	0	3		DWR
7/10 1430	1420	74	8.0	94	36	7.1	0.26[c]		2.0 / 0.09		0.0 / 0.00	18 / 0.30		0.6 / 0.02			0.0			25	26	13	0	4		USGS
8/2 0955	485	73	8.3	96	49	7.5	0.36[c]		2.6 / 0.11		0.0 / 0.00	21 / 0.34		2.8 / 0.08			0.0			34	23	18	1	7		
9/5 0818	9.0	70	6.1	68	64	7.4	6.2 / 0.31	2.1 / 0.17	3.2 / 0.14	1.3 / 0.03	0.0 / 0.00	36 / 0.59	0.6 / 0.01	1.6 / 0.05	0.3 / 0.00	0.2 / 0.01	0.0	9.7	Zn 0.02, PO_4 0.15, ABS 0.0	43	22	24	0	2		
10/10 0950	7	67	6.5	71	102	7.5	0.88[c]		4.3 / 0.19		0.0 / 0.00	53 / 0.87		2.0 / 0.06			0.0			70	18	44	1	10		
11/7 1300	16	63	11.2	116	198	8.1	1.48[c]		13 / 0.57		0.0 / 0.00	103 / 1.69		5.0 / 0.14			0.1			136	28	74	0	4		
12/13 0905	20	44	11.6	95	176	8.1	1.32[c]		11 / 0.48		0.0 / 0.00	89 / 1.46		6.8 / 0.19			0.0			121	27	66	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

KINGS RIVER BELOW PINE FLAT DAM (STA. 33b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/3 1320	95	50	10.7	94	42.9	6.9	0.34[c]		2.6 / 0.11		0.0 / 0.00	27 / 0.44		0.5 / 0.01			0.0			32	24	17	0	3	Median 2.3	
2/1 1345	103	52	10.6	96	50.9	6.9	0.36[c]		3.9 / 0.17		0.0 / 0.00	20 / 0.33		1.5 / 0.04			0.0			38	32	18	2	3	Maximum 7000.	
2/28 1330	480	52	10.7	97	47	7.3	0.38[c]		2.2 / 0.10		0.0 / 0.00	24 / 0.39		0.2 / 0.01			0.0			36	21	19	0	3	Minimum 0.045	
4/3 1350	135	61	10.1	102	39	6.9	0.22[c]		2.7 / 0.12		0.0 / 0.00	17 / 0.28		1.5 / 0.04			0.0			29	35	11	0	5		
5/1 1515	985	59	9.9	97	50	7.3	5.3 / 0.29	0.6 / 0.05	3.0 / 0.13	0.9 / 0.02	0.0 / 0.00	20 / 0.33	3.0 / 0.06	2.8 / 0.08	0.3 / 0.00	0.0 / 0.00	0.0	8.2	Al 0.04, Zn 0.02, PO_4 0.00, ABS 0.0, Cu 0.01	35	27	17	1	1		
6/5 1600	1712	62	10.0	101	42	6.3	4.0 / 0.20	1.5 / 0.12	2.2 / 0.10		0.0 / 0.00	22 / 0.36		1.0 / 0.03			0.1			31	24	16	0	4		
7/10 1230	2712	70	10.4	116	28	7.0	0.19[c]		1.6 / 0.07	0.7 / 0.02	0.0 / 0.00	15 / 0.25		0.1 / 0.00			0.0			22	25	10	0	10		
8/7 1345	2296	52	10.1	92	51	7.0	0.39[c]		2.7 / 0.12		0.0 / 0.00	26 / 0.43		1.0 / 0.03			0.0			38	24	20	0	3		
9/5 1335	833	69	10.2	113	34	7.2	3.8 / 0.19	0.6 / 0.05	1.7 / 0.07	0.6 / 0.02	0.0 / 0.00	18 / 0.30	0.6 / 0.01	0.1 / 0.00	0.6 / 0.01	0.4 / 0.02	0.0	7.2	PO_4 0.05, Al 0.05, Zn 0.01, ABS 0.0	25	21	12	0	4		
10/2 1420	410	73	10.4	121	48	6.9	0.48[c]		1.9 / 0.08		0.0 / 0.00	22 / 0.36		1.2 / 0.03			0.0			36	17	20	2	7		
11/6 1345	49	64	10.3	108	57	7.8	0.40[c]		2.6 / 0.11		0.0 / 0.00	26 / 0.43		1.8 / 0.05			0.2			42	22	20	0	8		
12/4 1400	35	54	10.3	96	54	6.9	0.48[c]		2.4 / 0.10		0.0 / 0.00	23 / 0.38		2.0 / 0.06			0.1			40	17	24	5	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR); as indicated.

32505-D-R 6-61 200 SPO

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

LINDSEY SLOUGH NEAR RIO VISTA (STA.110)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961	Tidal																								Median 62.	
1/9 1030		45	10.5	87	197	7.2/7.6	1.46[c]		13/0.57		0/0.00	84/1.38		10/0.28			0.1			120[e]	28	73	4	28	Maximum 2400.	USGS
2/13 1200		53	8.6	79	302	7.3/7.6	1.82[c]		26/1.13		0/0.00	103/1.69		22/0.62			0.2			184[e]	38	91	7	85	Minimum 2.0	
3/6 1140		52	10.4	94	279	7.5/8.2	1.80[c]		17/0.74		0/0.00	107/1.75		17/0.48			0.2			170[e]	29	90	2	48		
4/10 1200		58	9.0	88	202	7.5/8.0	1.38[c]		15/0.65		0/0.00	83/1.36		10/0.28			0.1			123[e]	32	69	1	35		
5/1 1110		62	9.0	92	199	7.5/7.9	13/0.65	8.5/0.70	14/0.61	1.2/0.03	0/0.00	84/1.38	15/0.31	9.4/0.27	1.2/0.02	0.2/0.01	0.1	18	Al 0.02 Fe 0.11[d] PO_4 0.20 ABS 0.0	122[f]	31	68	0	30		
6/5 0945		67	8.3	89	234	7.7/8.0	1.59[c]		19/0.83		0/0.00	100/1.64		12/0.34			0.0			142[e]	34	79	0	35		
7/10 0950		76	7.7	91	221	7.6/7.7	1.60[c]		17/0.74		0/0.00	93/1.52		14/0.39			0.1			135[e]	32	80	4	75		
8/8 1330		76	7.4	87	188	7.4/7.7	1.35[c]		12/0.52		0/0.00	85/1.39		9.4/0.27			0.0			114[e]	28	68	0	-		
9/12 1210		74	7.6	88	228	7.5/7.9	15/0.75	9.6/0.79	17/0.74	1.6/0.04	0/0.00	102/1.67	13/0.27	11/0.31	0.4/0.01	0.1/0.01	0.0	21	Cu 0.01 Zn 0.01[d] AS 0.01 PO_4 0.35 ABS 0.0	139[f]	32	77	0	75		
10/5 1515		70	7.7	86	236	7.6/7.9	1.60[c]		17/0.74		0/0.00	106/1.74		13/0.37			0.1			144[e]	32	80	0	50		
11/7 1330		59	8.4	84	222	7.4/7.8	1.44[c]		17/0.74		0/0.00	90/1.48		12/0.34			0.0			135[e]	34	72	0	25		
12/7 1505		51	8.5	76	313	7.3/7.9	188[c]		28/1.22		0/0.00	107/1.75		24/0.68			0.3			191[e]	39	94	6	120		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

LITTLE POTATO SLOUGH AT TERMINOUS (STA. 99)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961	Tidal																									
1/9 1145		45	10.4	86	191	7.1/7.5	—/1.32[c]		12/0.52		0/0.00	77/1.26		10/0.28			0.1			115[e]	28	66	3	20	Median 96.	USGS
2/13 1300		52	7.4	67	257	7.1/7.4	—/1.78[c]		16/0.70		0/0.00	74/1.21		32/0.90			0.1			154[e]	28	89	28	46	Maximum 7000.	
3/6 1000		52	9.8	88	210	7.3/7.8	—/1.51[c]		13/0.57		0/0.00	84/1.38		18/0.51			0.2			126[e]	27	75	6	30	Minimum 6.2	
4/10 1030		60	9.0	90	150	7.3/7.9	—/1.18[c]		8.4/0.37		0/0.00	66/1.08		9.0/0.25			0.1			90[e]	24	59	5	15		
5/1 0915		62	9.0	92	181	7.3/7.9	13/0.65	7.7/0.63	12/0.52	1.3/0.03	0/0.00	74/1.21	13/0.27	12/0.34	0.0/0.00	0.1/0.01	0.0	19	Al 0.01 Zn 0.01 PO4 0.25 Fe 0.05 ABS 0.0 [d]	114[f]	28	64	3	25		
6/5 0815		67	7.7	83	218	7.[illegible]/8.0	—/1.51[c]		13/0.78		0/0.00	94/1.54		12/0.34			0.1			131[e]	36	71	0	25		
7/10 0815		75	7.1	83	219	7.3/7.7	—/1.46[c]		16/0.70		0/0.00	82/1.34		20/0.56			0.1			131[e]	32	73	6	26		
8/8 1[illegible]15		77	7.7	92	198	7.2/8.0	—/1.36[c]		1[illegible]/0.71		0/0.00	76/1.25		14/0.39			0.0			119[e]	32	65	3	--		
9/7 1230		74	7.0	81	251	7.0/8.0	16/0.80	10/0.84	19/0.83	1.6/0.04	0/0.00	102/1.67	11/0.23	20/0.56	0.0/0.00	0.2/0.01	0.0	19	Cu 0.01 PO4 0.25 ABS 0.0 [d]	147[f]	33	82	0	10		
10/4 1130		72	6.8	77	246	7.3/7.8	—/1.78[c]		17/0.74		0/0.00	100/1.64		22/0.62			0.1			148[e]	30	85	3	40		
11/8 1020		56	7.5	71	265	7.2/7.9	—/1.74[c]		19/0.83		0/0.00	90/1.48		24/0.68			0.0			159[e]	32	87	13	15		
12/11 1000		46	8.7	73	192	6.8/7.7	—/1.33[c]		13/0.57		0/0.00	54/0.89		16/0.45			0.0			119[e]	30	67	23	25		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

MCCLOUD RIVER ABOVE SHASTA LAKE (STA. 18)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										
1/11 0835	1,210	44	11.7	95	100	7.1/7.9	—/0.88[c]		5.0/0.22		0.0/0.00	66/1.08		0.2/0.01			0.0			89[e]	20	44	0	3	Median 0.62	USGS
2/14 0800	3,450	41	11.8	92	82.2	7.1/8.0	—/0.69[c]		3.3/0.14		0.0/0.00	50/0.82		0.2/0.01			0.0			73[e]	17	35	0	8	Maximum 2,400.	
3/7 0730	1,480	45	11.9	98	96	7.3/7.9	—/0.79[c]		7.6/0.33		0.0/0.00	53/0.87		2.2/0.06			0.0			86[e]	29	40	0	1	Minimum 0.046	
4/11 0800	1,710	48	11.4	98	94	7.2/8.0	—/0.86[c]		4.2/0.18		0.0/0.00	54/0.89		1.8/0.05			0.0			84[e]	17	43	0	1		
5/9 0640	1,530	50	10.5	93	94	7.4/7.6	10/0.50	3.6/0.30	2.8/0.12	1.3/0.03	0.0/0.00	56/0.92	1.4/0.03	0.2/0.01	0.2/0.00	0.1/0.01	0.0	31	Al 0.06 d; PO_4 0.15; ABS 0.0	79[f]	13	40	0	1		
6/14 1335	1,330	58	9.8	95	100	7.5/7.8	—/0.79[c]		5.1/0.22		0.0/0.00	58/0.95		0.1/0.00			0.0			89[e]	22	39	0	7		
7/11 1000	1,080	55	10.3	97	97	7.3/8.0	—/0.82[c]		4.9/0.21		0.0/0.00	55/0.90		1.8/0.05			0.0			87[e]	20	41	0	0		
8/2 0640	1,020	53	10.5	96	95	7.3/8.1	—/0.74[c]		4.9/0.21		0.0/0.00	55/0.90		2.8/0.08			0.1			85[e]	22	37	0	4		
9/11 1215	984	52	10.5	95	95	7.5/8.1	10/0.50	3.2/0.26	4.3/0.19	1.2/0.03	0.0/0.00	55/0.90	1.0/0.02	2.8/0.08	0.2/0.00	0.1/0.01	0.0	37	Fe 0.03 d; PO_4 0.10; ABS 0.0	87[f]	19	38	0	6		
10/3 0750	958	50	11.0	97	95	7.3/8.0	—/0.72[c]		6.3/0.27		0.0/0.00	54/0.89		0.8/0.02			0.0			85[e]	27	36	0	3		
11/13 1250	940	45	11.7	97	96	7.6/7.8	—/0.74[c]		4.3/0.19		0.0/0.00	54/0.89		1.0/0.03			0.0			86[e]	20	37	0	4		
12/4 1345	1,980	45			90	7.2/7.7	—/0.78[c]		3.9/0.17		0.0/0.00	49/0.80		1.5/0.04			0.1			80[e]	18	39	0	3		

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

MERCED RIVER BELOW EXCHEQUER DAM (STA. 32a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/3 1345	41	44	12.2	99	113	7.7	—/0.96[c]		4.2/0.18		0.0/0.00	64/1.05		3.5/0.10			0.0			74	16	48	0	8	Median 2.3	
2/6 1400	39	48	12.2	105	119	8.0	—/0.98[c]		3.4/0.15		0.0/0.00	52/0.85		3.5/0.10			0.0			78	13	49	6	8	Maximum 2400.	
3/1 1550	35	50	12.1	106	118	8.0	—/0.99[c]		4.4/0.19		0.0/0.00	52/0.85		3.3/0.09			0.0			77	16	50	7	4	Minimum 0.045	
4/3 1630	39	56	12.3	117	118	7.9	—/0.99[c]		2.4/0.10		0.0/0.00	51/0.84		5.6/0.16			0.0			77	9	49	7	1		
5/8 1450	1495	58	9.5	92	39	7.3	4.4/0.22	1.0/0.08	2.0/0.09	0.7/0.02	0.0/0.00	16/0.26	2.0/0.04	2.8/0.08	0.1/0.00	0.0/0.00	0.0	7.1	Fe 0.01, Cu 0.01, Al 0.05, Zn 0.02, PO_4 0.00, ABS 0.0	28	22	15	2	3		
6/7 1100	1510	60	9.1	91	26	7.2	3.0/0.15	0.5/0.04	1.7/0.07		0.0/0.00	13/0.21		1.0/0.03			0.1			17	27	10	0	2		
7/12 1000	158	75	7.8	91	57	7.7	—/0.47[c]		2.0/0.09		0.0/0.00	28/0.46		0.8/0.02			0.0			37	16	24	1	20		
8/4 1103	169	76	8.3	99	74	7.3	—/0.62[c]		2.5/0.11		0.0/0.00	33/0.54		3.8/0.11			0.1			48	15	31	4	8		
9/8 0835	143	75	7.3	91	95	7.6	12/0.60	2.4/0.20	3.2/0.14	0.7/0.02	0.0/0.00	48/0.79	3.0/0.06	3.2/0.09	0.8/0.01	0.1/0.01	0.0	9.3	Zn 0.01, PO_4 0.05, ABS 0.0	59	15	40	1	35		
10/11 1000	41		9.4		141	7.7	—/1.32[c]		3.9/0.17		0.0/0.00	69/1.13		4.8/0.14			0.1			92	11	66	9	20		
11/9 1040	43	56	10.4	100	174	8.1	—/1.48[c]		4.6/0.20		0.0/0.00	84/1.38		8.2/0.23			0.0			114	12	74	5	30		
12/7 1330	35	50	10.6	94	144	7.1	—/1.24[c]		4.5/0.20		0.0/0.00	53/0.87		5.2/0.15			0.0			94	14	62	19	40		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C-4-4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

MERCED RIVER NEAR STEVINSON (STA. 32)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/12 1230	113	51	10.3	92	304	8.0	1.84[c]		28/1.22		0.0/0.00	157/2.57		15/0.42			0.0			196	40	92	0	4	Median 62.	
2/16 1455	141	60	10.4	104	295	8.0	1.72[c]		30/1.30		0.0/0.00	132/2.16		16/0.45			0.0			190	43	86	0	10	Maximum 7000.	
3/9 1150	103	60	10.9	109	314	8.0	1.88[c]		30/1.30		0.0/0.00	130/2.13		18/0.51			0.0			202	41	94	0	6	Minimum 2.3	
4/13 1400	17	70	12.2	136	394	8.4	2.42[c]		45/1.96		4/0.13	166/2.72		34/0.96			0.0		Total Alk 174	253	45	121	0	2		
5/4 1105	71	66	9.5	101	294	7.8	22/1.10	7.1/0.58	30/1.30	2.0/0.05	0.0/0.00	132/2.16	15/0.31	20/0.56	3.4/0.05	0.1/0.01	0.1	26	Fe 0.02, Cu 0.01, Zn 0.02, PO_4 0.20, ABS 0.0	191	43	84	0	25		
6/8 0805	87.6	69	8.0	88	286	7.9	21/1.05[c]	6.9/0.57	28/1.22		0.0/0.00	129/2.11		16/0.45			0.1			184	43	81	0	5		
7/13 1000	28	78	8.9	107	394	7.9	1.94[c]		44/1.91		0.0/0.00	160/2.62		35/0.99			0.0			254	50	97	0	8		
8/3 1115		74	11.0	128	595	8.1	2.98[c]		66/2.87		0.0/0.00	205/3.36		80/2.26			0.0			383	49	149	0	13		
9/7 1055	36	74	7.1	82	333	7.7	23/1.15	8.9/0.73	32/1.39	1.7/0.04	0.0/0.00	149/2.44	12/0.25	24/0.68	2.3/0.04	0.1/0.01	0.0	30	Zn 0.01, PO_4 0.25, ABS 0.0	207	42	94	0	15		
10/12 1105		66	9.3	99	359	8.0	2.04[c]		36/1.57		0.0/0.00	157/2.57		26/0.73			0.0			231	43	102	0	20		
11/8 1430	47	61	10.5	107	358	8.4	1.96[c]		38/1.65		4/0.13	148/2.43		26/0.73			0.0			231	46	98	0	3		
12/5 1235		52	9.7	88	301	7.5	1.88[c]		28/1.22		0.0/0.00	139/2.28		14/0.39			0.0			194	39	94	0	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

MILL CREEK NEAR MOUTH (STA. 88)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/3 1325	120	42	13.1	104	191	7.3 / 8.0	1.18[c]		18 / 0.78		0.0 / 0.00	62 / 1.02		17 / 0.48			0.5			142[e]	40	59	8	12	Median 23.	USGS
2/16 1055	463	48	11.8	102	112	7.3 / 7.9	0.66[c]		7.1 / 0.31		0.0 / 0.00	47 / 0.77		7.2 / 0.20			0.2			83[e]	32	33	0	3	Maximum 620.	
3/15 0900	716	49	11.2	97	117	7.3 / 7.7	0.76[c]		8.1 / 0.35		0.0 / 0.00	51 / 0.84		7.5 / 0.21			0.2			87[e]	32	38	0	15	Minimum 0.045-	
4/11 1250	173	60	10.2	102	122	7.4 / 7.8	0.70[c]		11 / 0.48		0.0 / 0.00	43 / 0.70		8.5 / 0.24			0.3			91[e]	41	35	0	1		
5/2 1310	155	62	9.7	99	125	7.3 / 7.8	9.6 / 0.48	3.4 / 0.28	10 / 0.44	1.6 / 0.04	0.0 / 0.00	39 / 0.64	13 / 0.27	9.5 / 0.27	0.0 / 0.00	0.2 / 0.01	0.0	29	Zn 0.02 As 0.03 d PO_4 0.05 ABS 0.0	96[f]	35	38	6	5		
6/6 1345	216	67	8.2	88	118	7.3 / 7.7	0.70[c]		8.6 / 0.37		0.0 / 0.00	32 / 0.52		8.2 / 0.23			0.2			88[e]	35	35	9	8		
7/6 1045	½ est.	68	9.0	98	153	7.2 / 7.7	0.92[c]		11 / 0.48		0.0 / 0.00	43 / 0.70		10 / 0.28			0.3			114[e]	34	46	11	7		
8/8 1235	½ est.	85	10.7	139	199	8.1 / 8.0	1.28[c]		14 / 0.61		0.0 / 0.00	64 / 1.05		18 / 0.51			0.5			148[e]	32	64	12	5		
9/14 1235	½ est.	76	10.5	124	261	7.9 / 8.0	22 / 1.10	8.5 / 0.70	17 / 0.74	3.2 / 0.08	0.0 / 0.00	98 / 1.61	18 / 0.37	20 / 0.56	0.2 / 0.00	0.1 / 0.01	0.6	37	Fe 0.11 Cu 0.01 d Mn 0.02 As 0.02 PO_4 0.10 ABS 0.0	175[f]	28	90	10	4		
10/2 0930	½ est.	67	7.9	85	244	7.1 / 7.9	1.58[c]		16 / 0.70		0.0 / 0.00	82 / 1.34		20 / 0.56			0.7			181[e]	31	79	12	5		
11/9 1515	18est.	52	11.2	102	211	7.7 / 8.0	1.16[c]		20 / 0.87		0.0 / 0.00	65 / 1.07		25 / 0.71			0.6			157[e]	43	58	5	5		
12/8 1040	100est.	43	12.0	97	214	7.3 / 7.7	1.18[c]		18 / 0.78		0.0 / 0.00	61 / 1.00		22 / 0.62			0.7			159[e]	40	59	9	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

MOKELUMNE RIVER BELOW COSUMNES RIVER (STA. 23b)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total[f] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1/16 1150		46			50				2.1					2.2						70	18					USBR
2/20 1125		53			93				4.6					1.4						78	22					USBR
3/13 1255		58			94				6.0					4.3						72	28					USBR
4/11 1230		64			89				5.0					4.0						96	24					USBR
5/15 1325		71			66				4.1					3.6						58	27					USBR
6/12 1435		74			192				15					13						114	34					USBR
7/18 1200		79			176				12					13						130	30					USBR
8/17 1320		76			186				13					13						148	30					USBR
9/19 1200		70			143				10					9.2						90	30					USBR
10/25 1240		60			167				13					16						112	34					USBR
11/13 1335		57			84				4.6					4.3						76	24					USBR
12/11 1055		46			61				4.1					7.8						48	29					USBR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

MOKELUMNE RIVER BELOW GEORGIANA SLOUGH (STA. 23c)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1/16 1105		46			198				13					11						144	29					USBR
2/20 1045		51			126				6.0					4.3						112	21					
3/13 1220		54			144				8.0					6.0						100	24					
4/10 1400		60			140				8.0					9.0						116	25					
5/15 1400		66			185				14					13						130	33					
6/12 1215		70			203				17					13						122	36					
7/17 1230		74			165				12					11						126	32					
8/14 1340		71			180				13					13						142	31					
9/19 1320		70			261				20					16						158	33					
10/25 0955		--			201				13					16						132	28					
11/13 1210		57			197				12					13						142	26					
12/11 1020		48			206				15					15						136	32					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

MOKELUMNE RIVER NEAR LANCHA PLANA (STA. 23a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 0.56	USGS
1/3 0935	155	48	11.8	102	36.6	6.9/7.1	—/0.30[c]		2.0/0.09		0/0.00	21/0.34		1.8/0.05			0.0			29[e]	23	15	0	3	Maximum 620.	
2/6 0945	80	49	11.4	99	50.3	6.8/7.4	—/0.38[c]		3.9/0.17		0/0.00	16/0.26		2.2/0.06			0.1			40[e]	31	19	6	3	Minimum 0.06	
3/1 1110	100	52	11.9	107	45	7.0/7.4	—/0.32[c]		2.3/0.10		0/0.00	16/0.26		4.5/0.13			0.0			36[e]	24	16	3	1		
4/3 1045	103	54	11.5	107	49	7.8/7.3	—/0.39[c]		1.3/0.06		0/0.00	17/0.28		4.6/0.13			0.1			39[e]	13	20	6	2		
5/8 0910	147	52	11.2	101	46	7.0/7.2	3.2/0.16	1.9/0.16	2.7/0.12	0.9/0.02	0/0.00	19/0.31	1.0/0.02	3.8/0.11	0.1/0.00	0.0/0.00	0.0	13	Al 0.05[d] Zn 0.06[d] PO_4 0.00 ABS 0.0	36[f]	26	16	0	1		
6/1 1345	346	55	10.7	100	46	7.0/7.6	—/0.34[c]		2.6/0.11		0/0.00	17/0.28		4.0/0.11			0.0			37[e]	24	17	3	2		
7/10 0930	350est.	57	10.2	98	50	7.0/7.5	—/0.34[c]		2.9/0.13		0/0.00	22/0.36		3.6/0.10			0.0			40[e]	28	17	0	2		
8/10 1000	590	58	10.6	103	56	7.2/7.4	—/0.36[c]		2.9/0.13		0/0.00	21/0.34		6.2/0.17			0.1			45[e]	27	18	1	4		
9/6 0920	143	59	9.4	92	54	6.9/7.4	4.6/0.23	1.6/0.13	2.5/0.11	0.7/0.02	0/0.00	18/0.30	5.0/0.10	4.6/0.13	0.0/0.00	0.2/0.01	0.0	10	Al 0.03[d] Cu 0.06[d] Zn 0.04 PO_4 0.05 ABS 0.0	38[f]	22	18	3	3		
10/4 1310	91	64	9.8	102	43	7.2/7.3	—/0.36[c]		2.0/0.09		0/0.00	18/0.30		2.2/0.06			0.0			34[e]	20	18	3	5		
11/8 1435	56	61	10.4	106	45	6.4/6.9	—/0.28[c]		1.9/0.08		0/0.00	11/0.18		4.0/0.11			0.0			36[e]	22	14	5	6		
12/11 1320	60	50	11.5	101	59	6.2/6.8	—/0.36[c]		2.2/0.10	2.4/0.06	0/0.00	11/0.18	12/0.25	3.6/0.10			0.0			47[e]	19	18	9	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

MOKELUMNE RIVER AT WOODBRIDGE (STA. 23)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 42. Maximum ≥ 7000. Minimum 0.62	USGS
1/13 1130	162	47	11.7	99	40.5	7.1 / 7.1	0.32[c]		2.0 / 0.09		0 / 0.00	24 / 0.39		2.2 / 0.06			0.0			31[e]	22	16	0	4		
2/17 1335	74	53	10.0	91	55.1	7.3 / 7.6	0.42[c]		3.6 / 0.16		0 / 0.00	20 / 0.33		2.8 / 0.08			0.0			42[e]	28	21	5	4		
3/10 1200	31	56	11.7	111	53	7.1 / 7.3	0.38[c]		3.0 / 0.13		0 / 0.00	19 / 0.31		4.6 / 0.13			0.0			41[e]	25	19	3	2		
4/14 1230	13	66	8.8	94	66	6.9 / 7.3	0.49[c]		3.5 / 0.15		0 / 0.00	26 / 0.43		4.8 / 0.14			0.0			51[e]	23	24	3	2		
5/5 0910	14	65	8.3	88	58	/ 7.0	6.4 / 0.32	0.7 / 0.06	3.9 / 0.17	1.5 / 0.04	0 / 0.00	23 / 0.38	1.0 / 0.02	3.6 / 0.10	0.9 / 0.01	0.0 / 0.00	0.1	10	Fe 0.12 Al 0.07[d] Cu 0.01 Zn 0.01 PO_4 0.10 ABS 0.0	39[f]	29	19	0	10		
6/1 0730	12	66	7.6	81	55	6.9 / 7.5	0.39[c]		3.1 / 0.13		0 / 0.00	21 / 0.34		4.2 / 0.12			0.0			42[e]	25	20	3	3		
7/14 0940	18	74	7.9	91	52	7.1 / 7.5	0.38[c]		2.9 / 0.13		0 / 0.00	23 / 0.38		3.1 / 0.09			0.0			40[e]	25	19	0	4		
8/10 0820	16	74	7.3	84	65	7.2 / 7.4	0.40[c]		4.3 / 0.19		0 / 0.00	25 / 0.41		7.0 / 0.20			0.1			50[e]	32	20	0	7		
9/7 0730	32	68	7.9	86	56	6.9 / 7.5	5.4 / 0.27	1.6 / 0.13	2.3 / 0.10	0.7 / 0.02	0 / 0.00	24 / 0.39	2.0 / 0.04	5.1 / 0.14	0.1 / 0.00	0.2 / 0.01	0.0	12	PO_4 0.05 ABS 0.0[d]	41[f]	19	20	0	2		
10/4 1600	24	70	8.4	93	58	7.0 / 7.2	0.44[c]		2.4 / 0.10		0 / 0.00	25 / 0.41		3.2 / 0.09			0.0			44[e]	19	22	2	5		
11/8 1315	24	58	9.9	97	63	6.6 / 7.2	0.36[c]		2.4 / 0.10		0 / 0.00	15 / 0.25		4.5 / 0.13			0.0			48[e]	22	18	6	11		
12/11 1200	64	43	12.0	96	53	6.9 / 7.3	0.42[c]		2.6 / 0.11		0 / 0.00	24 / 0.39		3.2 / 0.09			0.0			41[e]	21	21	1	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

OLD RIVER AT CLIFTON COURT FERRY (STA. 104)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961	Tidal																								Median 23. Maximum >7000. Minimum 2.3	USGS
1/9 1515		45	10.8	89	821	7.4/7.8	3.66[c]		75/3.26		0/0.00	126/2.07		142/4.00			0.3			467[e]	47	183	80	13		
2/13 1710		56	6.4	61	1,020	7.1/7.5	4.60[c]		106/4.61		0/0.00	140/2.29		178/5.02			0.5			580[e]	50	230	115	15		
3/7 0845		53	10.1	92	886	7.3/7.9	4.56[c]		91/3.96		0/0.00	109/1.79		136/3.84			0.1			504[e]	46	228	139	25		
4/11 0900		60	9.6	96	315	7.5/7.8	1.92[c]		27/1.17		0/0.00	81/1.33		39/1.10			0.1			179[e]	38	96	30	20		
5/2 0830		65	8.2	86	214	7.3/7.9	15/0.75	8.4/0.69	16/0.70	1.6/0.04	0/0.00	70/1.15	17/0.35	21/0.59	0.1/0.00	0.2/0.01	0.1	17	Al 0.02 Fe 0.04[d] PO_4 0.10 ABS 0.0	130[f]	32	72	15	20		
6/5 1445		70	7.6	84	241	7.3/7.8	1.52[c]		19/0.83		0/0.00	81/1.33		21/0.59			0.1			137[e]	35	76	10	20		
7/10 1510		78	5.7	69	327	7.4/7.9	1.76[c]		31/1.35		0/0.00	87/1.43		44/1.24			0.1			186[e]	43	88	17	36		
8/3 1220		77	6.6	79	760	7.3/7.8	2.44[c]		97/4.22		0/0.00	82/1.34		169/4.77			0.0			432[e]	63	122	55	-		
9/11 1310		74	7.2	84	585	7.5/7.8	18/0.90	16/1.30	69/3.00	3.3/0.08	0/0.00	89/1.46	25/0.52	120/3.38	0.9/0.01	0.2/0.01	0.1	16	Al 0.07 PO_4 0.20[d] Cu 0.01 Zn 0.08 AS 0.01 ABS 0.0	333[f]	57	110	37	35		
10/6 0905		70	6.8	76	430	7.3/7.7	2.00[c]		46/2.00		0/0.00	103/1.69		65/1.83			0.1			245[e]	50	100	16	50		
11/6 1430		58	10.7	105	914	8.2/8.1	4.18[c]		104/4.52		0/0.00	163/2.67		155/4.37			0.2			520[e]	52	209	75	10		
12/12 1245		48	8.2	70	1,070	7.6/7.6	4.96[c]		121/5.26		0/0.00	182/2.98		184/5.19			0.4			609[e]	51	248	99	12		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

OLD RIVER AT HOLAND TRACT (STA. 108a)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in ppm (equivalents per million): Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total[g] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1/16 1515		46			557				48					77						392	37					USBR
2/21 1305		55			610				54					94						398	39					USBR
3/14 1500		57			337				28					44						228	36					USBR
4/10 1250		63			182				13					16						146	31					USBR
5/11 0930		64			169				13					15						118	33					USBR
6/12 1230		71			216				--					--						158	--					USBR
7/17 1015		76			835				98					158						498	51					USBR
8/17 1300		74			1031				129					258						616	54					USBR
9/18 1150		69			514				56					100						306	47					USBR
10/16 1230		--			398				38					58						246	42					USBR
11/13 1030		58			411				31					50						230	33					USBR
12/12 0925		47			350				30					43						218	37					USBR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C-4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

OLD RIVER AT MANDEVILLE ISLAND (STA . 112)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961	Tidal																								Median 23.	USGS
1/6 0915		43	9.9	79	403	7.1 / 7.8	2.14[c]		26 / 1.13		0 / 0.00	87 / 1.43		54 / 1.52			0.1			234[e]	35	107	36	22	Maximum >7000.	
2/9 0930		53	9.72	84	678	7.2 / 7.6	3.68[c]		57 / 2.48		0 / 0.00	90 / 1.48		100 / 2.82			0.2			393[e]	40	184	110	15	Minimum 2.3	
3/10 0845		52	9.8	89	329	7.3 / 7.9	1.92[c]		25 / 1.09		0 / 0.00	82 / 1.34		40 / 1.13			0.0			191[e]	36	96	29	25		
4/5 1800		62	9.5	97	201	7.4 / 8.0	1.40[c]		14 / 0.61		0 / 0.00	74 / 1.21		16 / 0.45			0.1			117[e]	30	70	9	25		
5/11 0900		65	8.9	94	177	7.5 / 7.5	13 / 0.65	7.2 / 0.59	12 / 0.52	1.4 / 0.04	0. / 0.00	72 / 1.18	11 / 0.23	12 / 0.34	0.4 / 0.01	0.1 / 0.01	0.1	19	Al 0.05 As 0.01[d] PO_4 0.15 ABS 0.0	111[f]	29	62	3	50		
6/1 1030		67	9.3	100	201	7.5 / 7.9	1.38[c]		16 / 0.70		0 / 0.00	80 / 1.31		12 / 0.34			0.0			117[e]	34	69	3	25		
7/12 1215		76	6.9	82	412	7.3 / 8.0	1.82[c]		44 / 1.91		0 / 0.00	85 / 1.39		70 / 1.97			0.1			238[e]	51	91	21	25		
8/9 1300		81	8.0	100	997	7.7 / 7.8	2.74[c]		135 / 5.87		0 / 0.00	81 / 1.33		237 / 6.68			0.1			578[e]	68	137	71	-		
9/6 1400		74	7.1	82	589	7.6 / 8.0	19 / 0.95	13 / 1.11	80 / 3.48	4.3 / 0.11	0 / 0.00	88 / 1.44	29 / 0.60	121 / 3.41	1.2 / 0.02	0.1 / 0.01	0.1	16	PO^4 0.25 Cu 0.01[d] Zn 0.01 ABS 0.0 Al 0.02	340[f]	62	103	31	110		
10/9 1530		65	8.7	92	325	7.6 / 8.0	1.80[c]		34 / 1.48		0 / 0.00	107 / 1.75		40 / 1.35			0.3			189[e]	45	90	2	30		
11/2 1305		57	9.5	91	303	7.6 / 8.1	1.72[c]		28 / 1.22		0 / 0.00	99 / 1.62		34 / 0.96			0.2			176[e]	41	86	5	20		
12/12 1330		50	10.1	89	313	7.7 / 7.7	1.94[c]		26 / 1.13		0 / 0.00	90 / 1.48		34 / 0.96			0.1			182[e]	37	97	23	40		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

OLD RIVER AT ORWOOD BRIDGE (STA. 108)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961	Tidal																								Median 62. Maximum 2400. Minimum 0.62	USGS
1/10 0815		43	9.6	77	876	7.1 / 7.3	4.00[c]		74 / 3.22		0 / 0.00	108 / 1.77		148 / 4.17			0.4			492[e]	45	200	111	11		
2/14 0825		55	6.9	65	1,070	7.0 / 7.3	5.20[c]		106 / 4.61		0 / 0.00	118 / 1.93		180 / 5.08			0.5			602[e]	47	260	163	20		
3/6 1550		55	10.3	96	828	7.3 / 7.8	4.16[c]		82 / 3.57		0 / 0.00	107 / 1.75		122 / 3.44			0.6			466[e]	46	208	120	50		
4/10 1530		60	9.2	92	228	7.4 / 8.0	1.54[c]		17 / 0.74		0 / 0.00	75 / 1.23		20 / 0.56			0.1			128[e]	32	77	15	25		
5/1 1400		66	8.5	91	196	7.5 / 7.8	14 / 0.70	6.4 / 0.53	18 / 0.78	1.2 / 0.03	0 / 0.00	71 / 1.16	15 / 0.31	17 / 0.48	0.0 / 0.00	0.1 / 0.01	0.1	16	PO_4 0.10 ABS 0.0 FE 0.07[d]	123[f]	38	61	3	25		
6/5 1315		70	7.4	82	217	7.3 / 7.9	1.44[c]		17 / 0.74		0 / 0.00	80 / 1.31		16 / 0.45			0.1			122[e]	34	72	6	25		
7/10 1310		79	6.9	84	377	7.4 / 7.8	1.74[c]		38 / 1.65		0 / 0.00	87 / 1.43		58 / 1.64			0.1			212[e]	49	87	16	31		
8/3 0930		77	6.5	78	938	7.3 / 7.5	2.79[c]		126 / 5.48		0 / 0.00	81 / 1.33		220 / 6.20			0.1			527[e]	66	140	74	-		
9/11 1045		73	6.9	78	630	7.4 / 8.0	18 / 0.90	18 / 1.44	74 / 3.22	4.0 / 0.10	0 / 0.00	89 / 1.46	31 / 0.65	132 / 3.72	1.3 / 0.02	0.2 / 0.01	0.0	18	PO_4 0.25 Cu 0.04 Zn 0.07 ABS 0.0[d]	354[f]	57	117	44	30		
10/6 1115		71	6.9	76	435	7.3 / 7.9	2.00[c]		47 / 2.04		0 / 0.00	106 / 1.74		74 / 2.09			0.1			244[e]	50	100	13	25		
11/6 1130		58	8.8	85	401	7.4 / 8.0	2.06[c]		39 / 1.70		0 / 0.00	107 / 1.75		52 / 1.47			0.1			225[e]	45	103	15	20		
12/13 1035		46	9.4	79	581	7.7 / 7.9	3.00[c]		58 / 2.52		0 / 0.00	115 / 1.88		84 / 2.37			0.3			327[e]	46	150	56	50		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

OLD RIVER NEAR TRACY (STA. 103)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961	Tidal																								Median 15. Maximum > 7000. Minimum 1.3	USGS
1/13 0810		46	8.4	70	833	7.3/7.8	/ 3.76[c]		69/3.00		0/0.00	129/2.11		137/3.86			0.3			468[e]	44	188	82	15		
2/17 1005		56	11.5	109	1,180	7.7/7.4	/ 5.16[c]		129/5.61		0/0.00	187/3.06		212/5.98			0.7			663[e]	52	258	105	8		
3/7 0815		51	12.4	110	1,230	8.1/8.0	/ 5.48[c]		146/6.35		0/0.00	182/2.98		218/6.15			0.6			692[e]	54	274	125	30		
4/11 0830		60	7.9	79	1,470	8.1/7.9	/ 6.78[c]		170/7.40		0/0.00	195/3.20		278/7.84			0.6			825[e]	52	339	179	20		
5/1 1630		70	5.6	62	1,230	7.8/8.0	61/3.04	31/2.56	145/6.31	6.2/0.16	0/0.00	187/3.06	107/2.23	230/6.49	0.6/0.01	0.2/0.01	0.4	2.4	Al 0.03 Zn 0.01 PO4 0.45 Fe 0.01 Cu 0.01 ABS 0.1 [d]	676[f]	52	280	127	10		
6/6 0655		67	7.4	80	1,330	8.3/8.2	/ 6.27[c]		152/6.61		0/0.00	194/3.18		249/7.02			0.5			747[e]	51	313	154	20		
7/11 0550		80	7.1	87	925	8.1/7.6	/ 4.38[c]		94/4.09		0/0.00	146/2.39		161/4.54			0.4			520[e]	48	219	99	31		
8/9 1215		81	6.5	81	714	7.6/7.4	/ 3.21[c]		74/3.22		0/0.00	137/2.25		124/3.50			0.3			401[e]	50	160	48	-		
9/7 1000		71	7.6	85	1,070	7.6/8.2	53/2.64	28/2.32	121/5.26	5.0/0.13	0/0.00	160/2.62	66/1.37	215/6.06	0.2/0.00	0.1/0.01	0.2	2.1	Cu 0.01 Zn 0.01 PO4 0.25 ABS 0.0 [d]	570[f]	51	248	114	20		
10/9 1225		63	10.7	110	1,430	7.6/8.1	/ 7.12[c]		171/7.44		0/0.00	232/3.80		315/8.88			0.6			803[e]	51	356	166	30		
11/13 1400		56	14.2	136	1,310	7.6/7.6	/ 5.88[c]		148/6.44		0/0.00	211/3.46		232/6.54			0.5			736[e]	52	294	121	6		
12/12 1120		45	6.0	50	1,180	7.7/7.6	/ 5.60[c]		133/5.79		0/0.00	214/3.51		196/5.53			0.5			663[e]	51	280	105	13		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

PAYNES CREEK NEAR RED BLUFF (STA. 88g)

Date and time sampled P.S.T	Discharge in cfs (Est. by Sampler)	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										
1/3 1115	25	50	11.3	100	212	7.3 / 8.0	1.46[c]		16 / 0.70		0.0 / 0.00	110 / 1.80		12 / 0.34			0.4			164[e]	32	73	0	6		USGS
2/16 0850	160	48	10.8	93	110	7.3 / 7.7	0.82[c]		5.9 / 0.26		0.0 / 0.00	57 / 0.93		2.8 / 0.08			0.0			85[e]	24	41	0	4		
3/14 1630	60	56	11.1	106	152	7.3 / 7.8	1.08[c]		11 / 0.48		0.0 / 0.00	83 / 1.36		6.5 / 0.18			0.2			117[e]	31	54	0	3		
4/11 0945	30	60	10.4	104	162	7.4 / 7.7	1.20[c]		12 / 0.52		0.0 / 0.00	86 / 1.41		8.0 / 0.23			0.2			125[e]	30	60	0	3		
5/1 1115	60	60	10.3	103	178	7.3 / 8.0	12 / 0.60	7.8 / 0.64	14 / 0.61	1.4 / 0.04	0.0 / 0.00	92 / 1.51	2.0 / 0.04	9.0 / 0.25	0.3 / 0.00	0.3 / 0.02	0.3	48	Al 0.04 PO_4 0.15 d ABS 0.0	140[f]	32	62	0	5		
6/6 1115	12	67	9.1	98	198	7.3 / 8.1	1.43[c]		16 / 0.70		0.0 / 0.00	103 / 1.69		12 / 0.34			0.3			153[e]	33	71	0	2		
7/6 1340		70	9.5	106	219	7.4 / 8.1	1.58[c]		18 / 0.78		0.0 / 0.00	112 / 1.84		14 / 0.39			0.4			169[e]	33	79	0	4		
8/3 0850	8	67	8.5	91	238	7.3 / 8.0	1.62[c]		17 / 0.74		0.0 / 0.00	120 / 1.97		17 / 0.48			0.5			184[e]	31	81	0	7		
9/14 0920	6	63	8.9	92	244	7.3 / 8.4	15 / 0.75	12 / 0.95	20 / 0.87	1.4 / 0.04	2 / 0.07	118 / 1.93	0.0 / 0.00	19 / 0.54	1.0 / 0.02	0.1 / 0.01	0.5	14	Tot. Alk. 122 d Fe 0.14 PO_4 0.15 Mn 0.01 ABS 0.0	143[f]	33	85	0	4		
10/2 1140	6	65	9.6	101	248	7.3 / 7.9	1.64[c]		21 / 0.91		0.0 / 0.00	122 / 2.00		17 / 0.48			0.6			192[e]	36	82	0	5		
11/16 1040	10	54	9.5	88	248	7.3 / 7.9	1.59[c]		21 / 0.91		0.0 / 0.00	121 / 1.98		18 / 0.51			0.5			192[e]	36	79	0	3		
12/7 0950	18	48	10.6	91	193	7.2 / 7.7	1.38[c]		15 / 0.65		0.0 / 0.00	98 / 1.61		9.8 / 0.28			0.3			149[e]	32	69	0	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

PIT RIVER NEAR BIEBER (STA. 17e)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/12 1600	168	35	11.7	84	254	7.3/7.7	1.52[c]		22/0.96		0.0/0.00	135/2.21		5.8/0.16			0.1			176[e]	39	76	0	300		USGS
2/16 0850	1,250	38	10.5	78	145	7.3/7.8	0.89[c]		13/0.57		0.0/0.00	76/1.25		0.9/0.03			0.1			100[e]	39	45	0	130		
3/9 0800	178	37	10.5	77	245	7.7/7.9	1.58[c]		22/0.96		0.0/0.00	130/2.13		6.5/0.18			0.2			170[e]	38	79	0	15		
4/12 1440	59	55	9.8	92	194	7.8/8.0	1.48[c]		14/0.61		0.0/0.00	114/1.87		2.8/0.08			0.0			134[e]	29	74	0	35		
5/11 0700	7.8	51	7.4	66	258	7.8/8.0	20/1.00	9.2/0.76	17/0.74	4.1/0.10	0.0/0.00	153/2.51	3.0/0.06	4.0/0.11	0.9/0.01	0.2/0.01	0.1	27	Fe 0.05 Zn 0.01 Al 0.11 ABS 0.0 PO_4 0.20 [d]	161[f]	28	88	0	10		
6/15 0930	47	73	7.2	83	341	7.9/8.3	2.17[c]		33/1.44		4/0.13	197/3.23		0.9/0.03			0.0		Tot. Alk. 205	236[e]	40	108	0	25		
7/12 1710	0.24	77	7.0	83	389	8.3/8.3	2.46[c]		36/1.57		4/0.13	214/3.51		6.0/0.17			0.1		Tot. Alk. 222	269[e]	39	123	0	14		
8/2 1140	No Flow	69	5.0	55	378	8.4/8.6	2.40[c]		39/1.70		16/0.53	189/3.10		7.8/0.22			0.1		Tot. Alk. 221	262[e]	41	120	0	15		
9/13 1145	DRY																									
10/4 1530	DRY																									
11/15 0930	24	35	10.1	72	378	7.9/7.8	2.30[c]		36/1.57		0.0/0.00	198/3.25		12/0.34			0.2			262[e]	41	115	0	25		
12/6 1100	111	34	11.2	79	262	7.5/7.6	1.48[c]		30/1.30		0.0/0.00	132/2.16		9.2/0.26			0.2			181[e]	47	74	0	30		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

PIT RIVER NEAR CANBY (STA. 17a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 9.6	USGS
1/12 1655	87	34	10.5	74	229	7.3 / 7.9	— / 1.40[c]		22 / 0.96		0.0 / 0.00	129 / 2.11		5.0 / 0.14			0.1			160[e]	41	70	0	100	Maximum 230.	
2/16 1150	218	40	10.3	79	204	7.5 / 7.8	— / 1.29[c]		18 / 0.78		0.0 / 0.00	106 / 1.74		2.1 / 0.06			0.1			143[e]	38	64	0	85	Minimum 0.045 -	
3/9 0930	49	41	10.3	80	293	7.9 / 8.0	— / 1.69[c]		41 / 1.78		0.0 / 0.00	145 / 2.38		11 / 0.31			0.3			205[e]	51	85	0	35		
4/12 1600	38.5	53	10.5	96	226	8.1 / 8.3	— / 1.51[c]		19 / 0.83		2 / 0.07	110 / 1.80		6.5 / 0.18			0.1		Tot. Alk. 114	158[e]	35	75	0	20		
5/11 0845	142	50	8.4	74	296	7.9 / 7.6	23 / 1.15	9.6 / 0.79	29 / 1.26	4.7 / 0.12	0.0 / 0.00	158 / 2.59	23 / 0.48	8.2 / 0.23	1.3 / 0.02	0.2 / 0.01	0.2	31	Fe 0.03 d; Al 0.22; PO_4 0.45; ABS 0.0	208[f]	38	97	0	100		
6/15 1025	42	75	8.4	98	355	8.3 / 8.2	— / 2.12[c]		36 / 1.57		0.0 / 0.00	186 / 3.05		5.4 / 0.15			0.0			248[e]	43	106	0	35		
7/12 1815	34	79	8.0	98	293	8.4 / 8.5	— / 2.04[c]		25 / 1.09		5 / 0.17	162 / 2.66		4.0 / 0.11			0.0		Tot. Alk. 172	205[e]	35	102	0	17		
8/2 1210	3.6	73	8.9	102	233	8.4 / 8.5	— / 1.61[c]		20 / 0.87		10 / 0.33	121 / 1.98		3.5 / 0.10			0.0		Tot. Alk. 141	163[e]	35	81	0	10		
9/13 1315	24	69	9.4	103	326	8.1 / 8.4	27 / 1.35	9.4 / 0.77	28 / 1.22	5.4 / 0.14	3 / 0.10	180 / 2.95	12 / 0.25	8.2 / 0.23	0.9 / 0.01	0.1 / 0.01	0.1	32	Tot. Alk. 186 d; Fe 0.17; PO_4 0.50; Mn 0.03; ABS 0.0	215[f]	35	106	0	30		
10/4 1655	13.6	64	10.4	108	354	7.9 / 8.5	— / 2.30[c]		30 / 1.30		7 / 0.23	174 / 2.85		10 / 0.28			0.2		Tot. Alk. 188	248[e]	36	115	0	25		
11/15 1055	30	37	11.8	87	340	8.0 / 8.0	— / 1.88[c]		37 / 1.61		0.0 / 0.00	174 / 2.85		12 / 0.34			0.2			238[e]	46	94	0	20		
12/6 1215	61	35	11.2	80	304	7.6 / 7.8	— / 1.68[c]		30 / 1.30		0.0 / 0.00	150 / 2.46		10 / 0.28			0.1			213[e]	44	84	0	35		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

PIT RIVER NEAR MONTGOMERY CREEK (STA. 17)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 0.62	USGS
1/12 1330	3,310	44	12.3	100	152	7.2/7.9	1.22[c]		11/0.48		0.0/0.00	91/1.49		3.2/0.09			0.0			114[e]	28	61	0	4	Maximum 7,000.	
2/15 1540	6,620	47	11.3	96	129	7.3/8.0	0.96[c]		7.7/0.33		0.0/0.00	75/1.23		0.2/0.01			0.1			97[e]	26	48	0	35	Minimum 0.045 -	
3/8 1515	4,730	48	11.3	97	143	7.5/8.1	1.05[c]		6.6/0.29		0.0/0.00	82/1.39		3.6/0.10			0.2			107[e]	22	52	0	8		
4/12 1245	4,900	55	10.7	101	134	7.6/8.1	1.06[c]		8.9/0.39		0.0/0.00	78/1.28		3.8/0.11			0.0			100[e]	27	53	0	5		
5/10 1345	4,750	55	10.2	96	127	7.9/8.1	12/0.60	4.9/0.40	7.9/0.34	1.7/0.04	0.0/0.00	76/1.25	2.0/0.04	3.2/0.09	0.0/0.00	0.1/0.01	0.1	30	Al 0.04 d; PO_4 0.15; Cu 0.01; ABS 0.0	99[f]	25	50	0	4		
6/15 0715	3,340	66	8.6	91	143	7.7/8.1	1.10[c]		8.5/0.37		0.0/0.00	83/1.36		1.3/0.04			0.0			107[e]	25	55	0	4		
7/12 1530	3,150	70	8.3	92	161	7.8/8.5	1.12[c]		14/0.61		3/0.10	86/1.41		4.0/0.11			0.0		Tot. Alk. 92	121[e]	35	56	0	3		
8/2 0900	3,020	66	9.3	99	154	8.2/7.9	1.11[c]		11/0.48		0.0/0.00	84/1.38		4.8/0.14			0.1			115[e]	30	55	0	9		
9/13 0940	619	62	9.7	99	153	7.9/8.2	13/0.65	5.7/0.47	10/0.44	2.2/0.06	0.0/0.00	87/1.43	2.0/0.04	5.8/0.16	0.6/0.01	0.2/0.01	0.1	33	Fe 0.04; Mn 0.02; Cu 0.01; PO_4 0.20; ABS 0.0 d	116[f]	27	56	0	3		
10/2 1440	612	60	9.0	90	152	7.8/8.1	1.08[c]		12/0.52		0.0/0.00	90/1.48		2.0/0.06			0.1			114[e]	32	54	0	5		
11/14 1540	2,580	49	10.6	92	154	7.8/8.0	1.12[c]		11/0.48		0.0/0.00	88/1.44		3.5/0.10			0.1			115[e]	30	56	0	4		
12/6 0850	1,570	44	11.5	93	151	7.4/7.9	1.16[c]		9.7/0.42		0.0/0.00	83/1.36		4.0/0.11			0.0			113[e]	27	58	0	6		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

PIT RIVER, SOUTH FORK NEAR LIKELY (STA. 18a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/13 0745	18.6	32	10.1	69	103	7.3/7.8	—/0.86[c]		5.7/0.25		0.0/0.00	70/1.15		0.0/0.00			0.0			89[e]	23	43	0	4	Median 6.2	USGS
2/16 1325	8.1	42	10.9	87	134	8.1/8.0	—/1.01[c]		8.1/0.35		0.0/0.00	74/1.21		0.0/0.00			0.1			116[e]	26	50	0	10	Maximum 7,000.+	
3/9 1145	5	41	10.5	82	121	8.1/8.0	—/0.92[c]		11/0.48		0.0/0.00	73/1.20		1.0/0.03			0.1			105[e]	34	46	0	3	Minimum 0.045-	
4/13 0800	47	40	11.3	87	87	7.6/7.9	—/0.72[c]		4.7/0.20		0.0/0.00	49/0.80		1.0/0.03			0.0			75[e]	22	36	0	2		
5/11 1140	122	48	10.4	90	110	8.1/7.5	9.2/0.46	4.4/0.36	5.1/0.22	2.4/0.06	0.0/0.00	63/1.03	1.6/0.03	1.5/0.04	0.8/0.01	0.1/0.01	0.0	33	Fe 0.06 d; Al 0.08; PO_4 0.10 ABS 0.0	89[f]	20	41	0	10		
6/15 1130	52	70	7.4	82	89	7.9/7.9	—/0.74[c]		3.6/0.16		0.0/0.00	54/0.89		0.1/0.00			0.0			77[e]	18	37	0	6		
7/13 0930	65	67	7.8	84	151	7.9/8.1	—/1.12[c]		10/0.44		0.0/0.00	83/1.36		1.5/0.04			0.1			130[e]	28	56	0	30		
8/2 1315	154	71	7.8	88	174	8.1/8.1	—/1.26[c]		12/0.52		0.0/0.00	95/1.56		3.5/0.10			0.2			150[e]	29	63	0	37		
9/13 1440	23	70	7.9	88	183	8.4/8.5	16/0.80	6.3/0.52	13/0.57	4.4/0.11	4/0.13	89/1.46	9.0/0.19	4.5/0.13	0.6/0.01	0.1/0.01	0.0	38	Tot. Alk. 97; Mn 0.21 d; Fe 0.33 PO_4 0.40; Al 0.05 ABS 0.0	140[f]	28	66	0	75		
10/5 0800	150	56	9.4	90	201	7.6/8.1	—/1.40[c]		14/0.61		0.0/0.00	106/1.74		3.0/0.08			0.1			174[e]	30	70	0	40		
11/15 1345	19	37	11.6	85	95	7.6/8.0	—/0.76[c]		4.2/0.18		0.0/0.00	56/0.92		0.2/0.01			0.0			82[e]	19	38	0	4		
12/6 1430	4.6	37	11.7	86	102	7.8/7.9	—/0.88[c]		6.1/0.27		0.0/0.00	62/1.02		1.2/0.03			0.0			88[e]	23	44	0	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

PUTAH CREEK NEAR WINTERS (STA. 81)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/5 1045	12	43	13.1	105	336	8.1/8.1	3.24[c]		9.9/0.43		0/0.00	195/3.20		6.0/0.17			0.2			202[e]	12	162	2	10	Median 4.2	
2/17 1605	75	52	12.5	112	326	8.1/8.5	3.22[c]		9.0/0.39		4/0.13	177/2.90		5.5/0.16			0.2			196[e]	11	161	9	3	Maximum 62.	
3/1 1630	84	55	12.0	112	324	8.1/8.5	3.16[c]		9.2/0.40		12/0.40	162/2.66		4.8/0.14			0.2			195[e]	11	158	5	5	Minimum 0.046	
4/13 1330	171	57	12.7	122	318	8.3/8.6	3.16[c]		9.1/0.40		8/0.27	172/2.82		5.5/0.16			0.1			191[e]	11	158	4	1		
5/4 1145	273	56	11.7	105	320	8.1/8.5	20/1.00	26/2.16	10/0.44	1.8/0.05	5/0.17	176/2.88	15/0.31	5.5/0.16	0.4/0.01	0.2/0.01	0.2	15	Al 0.07 Cu 0.01[d] Zn 0.01 PO_4 0.05 ABS 0.0	186[f]	12	158	5	10		
6/1 0745	360	54	9.8	91	318	8.0/8.5	3.17[c]		8.6/0.37		6/0.20	174/2.85		7.8/0.22			0.2			191[e]	10	159	6	1		
7/7 0945	386	55	10.4	98	321	8.0/8.3	3.23[c]		8.8/0.38		4/0.13	176/2.88		5.2/0.15			0.3			193[e]	11	162	11	6		
8/14 1700	322	60	11.2	112	334	8.1/7.9	3.14[c]		10/0.44		0/0.00	186/3.05		7.6/0.21			0.1			201[e]	12	157	4	4		
9/12 1410	260	66	11.1	118	316	7.4/8.5	20/1.00	26/2.12	7.7/0.33	1.8/0.05	20/0.67	144/2.36	11/0.23	4.2/0.12	0.3/0.00	0.2/0.01	0.0	13	Cu 0.01 Zn 0.01[d] PO_4 0.05 ABS 0.0	175[f]	9	156	4	2		
10/9 1010	69	56	11.9	113	334	7.6/8.1	3.16[c]		9.0/0.39		0/0.00	190/3.11		6.0/0.17			0.0			201[e]	11	158	2	6		
11/9 1340	11	56	13.6	130	332	7.7/8.5	3.16[c]		10/0.44		9/0.30	173/2.84		7.4/0.21			0.2			200[e]	12	158	1	3		
12/12 1215	11	50	12.8	113	365	7.6/8.1	3.37[c]		12/0.52		0/0.00	195/3.20		12/0.34			0.2			220[e]	13	168	3	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

RED BANK CREEK NEAR RED BLUFF (STA. 88d)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/3 0755	1.8	38	12.1	90	578	7.5/8.5	61/3.04	29/2.38	19/0.83	0.5/0.01	7/0.23	234/3.84	72/1.50	30/0.85	1.6/0.03	0.0/0.00	0.1	11	Tot. Alk. 248	346[f]	13	271	68			USGS
2/15 1200	58	55	10.2	96	432	8.1/8.5	48/2.40	22/1.80	14/0.61	0.2/0.01	8/0.27	204/3.34	47/0.98	6.0/0.17	1.9/0.03	0.1/0.01	0.1	17	Tot. Alk. 220	264[f]	13	210	30			
3/2 1700	23.4	60	9.8	98	475	8.2/8.4	4.52[c]		17/0.74		7/0.23	215/3.52		10/0.28			0.1		Tot. Alk. 229	279[e]	14	226	38	3		
4/10 1705	13.6	73	8.7	100	522	8.3/8.4	5.08[c]		19/0.83		6/0.20	253/4.15		10/0.28			0.1		Tot. Alk. 265	307[e]	14	254	37	8		
5/1 1720	10.8	67	9.5	102	496	8.0/8.2	47/2.35	29/2.35	18/0.78	0.9/0.02	0.0/0.00	236/3.87	55/1.15	12/0.34	0.0/0.00	0.0/0.00	0.0	20	PO_4 0.00 ABS 0.0 d	298[f]	14	235	41	5		
6/7 1315	2	82	10.0	125	492	7.9/8.2	5.04[c]		18/0.78		0.0/0.00	268/4.39		14/0.39			0.0			289[e]	13	252	32	2		
7/5 1800	DRY																									
8/9 0750	DRY																									
9/6 1040	DRY																									
10/9 1500	DRY																									
11/16 1200	DRY																									
12/7 1050	5 est.	44	10.8	88	525	7.7/8.2	4.96[c]		18/0.78		0.0/0.00	198/3.25		25/0.71			0.1			309[e]	14	248	86	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR); as indicated.

TABLE C-4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

ROCK SLOUGH NEAR KNIGHTSEN (STA. 109)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961	Tidal																								Median 23.	USGS
1/9 1335		46	9.2	77	864	7.2 / 7.6	4.12[c]		66 / 2.87		0 / 0.00	123 / 2.02		136 / 3.84			0.5			496[e]	41	206	105	11	Maximum 7000.	
2/13 1540		55	7.7	72	1,100	7.1 / 7.4	5.38[c]		106 / 4.61		0 / 0.00	132 / 2.16		188 / 5.30			0.6			632[e]	46	269	161	30	Minimum 2.3	
3/6 1340		54	10.0	93	754	7.3 / 7.9	3.76[c]		74 / 3.22		0 / 0.00	103 / 1.69		110 / 3.10			0.5			434[e]	46	188	104	50		
4/10 1500		64	9.0	94	251	7.5 / 7.8	1.62[c]		19 / 0.83		0 / 0.00	77 / 1.26		26 / 0.73			0.1			145[e]	34	81	18	35		
5/1 1300		65	7.2	76	190	7.3 / 7.8	13 / 0.65	8.0 / 0.66	14 / 0.61	1.2 / 0.03	0 / 0.00	73 / 1.20	14 / 0.29	15 / 0.42	0.0 / 0.00	0.2 / 0.01	0.0	17	PO_4 0.10 FE 0.09[d] ABS 0.0	118[f]	31	65	5	25		
6/5 1210		70	6.9	76	227	7.3 / 7.8	1.45[c]		18 / 0.78		0 / 0.00	82 / 1.34		17 / 0.48			0.1			130[e]	35	73	6	35		
7/10 1215		80	6.0	74	413	7.4 / 7.7	1.88[c]		42 / 1.83		0 / 0.00	89 / 1.46		68 / 1.92			0.1			238[e]	49	94	21	47		
8/3 0850		76	6.4	76	1,100	7.3 / 7.2	3.10[c]		151 / 6.57		0 / 0.00	84 / 1.38		269 / 7.59			0.2			632[e]	68	155	86	25		
9/11 0940		72	6.2	71	693	7.3 / 7.9	18 / 0.90	19 / 1.58	89 / 3.87	3.8 / 0.10	0 / 0.00	90 / 1.48	33 / 0.69	146 / 4.12	0.2 / 0.00	0.1 / 0.01	0.0	18	Al 0.05 PO_4 0.20[d] Cu 0.01 Zn 0.04 ABS 0.0	371[f]	60	124	50	20		
10/6 1245		72	6.8	77	450	7.3 / 7.8	2.00[c]		50 / 2.18		0 / 0.00	104 / 1.70		64 / 1.80			0.1			259[e]	52	100	15	30		
11/6 1040		57	8.1	78	393	7.3 / 8.0	2.04[c]		39 / 1.70		0 / 0.00	106 / 1.74		52 / 1.47			0.3			226[e]	45	102	15	20		
12/13 1135		45	9.1	75	475	7.3 / 7.8	2.60[c]		46 / 2.00		0 / 0.00	104 / 1.70		58 / 1.64			0.3			273[e]	43	130	45	35		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc (TTL), or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT BEND (STA. 12c)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/3 0840	5,150	46	11.2	94	137	7.3 / 7.8	1.08[c]		8.0 / 0.35		0.0 / 0.00	72 / 1.18		3.5 / 0.10			0.0			105[e]	24	54	0	5	Median 180.	USGS
2/15 1315	24,200	50	10.7	95	119	7.3 / 7.9	0.92[c]		6.1 / 0.27		0.0 / 0.00	60 / 0.98		2.0 / 0.06			0.0			92[e]	23	46	0	20	Maximum 7,000.+	
3/15 0650	23,100	50	10.5	93	112	7.3 / 7.6	0.88[c]		5.5 / 0.24		0.0 / 0.00	57 / 0.93		1.8 / 0.05			0.2			86[e]	21	44	0	70	Minimum 0.62	
4/11 0700	8,270	55	10.2	96	126	7.5 / 8.0	1.00[c]		6.3 / 0.27		0.0 / 0.00	68 / 1.11		3.0 / 0.08			0.0			97[e]	21	50	0	0.4		
5/2 0645	9,460	52	10.6	96	122	7.3 / 7.8	10 / 0.50	6.1 / 0.50	7.0 / 0.30	0.8 / 0.02	0.0 / 0.00	72 / 1.18	6.4 / 0.13	1.5 / 0.04	0.0 / 0.00	0.1 / 0.01	0.1	23	Fe 0.12 Al 0.02 d Cu 0.02 Zn 0.01 As 0.01 PO_4 0.00 ABS 0.0	90[f]	23	50	0	3		
6/6 0940	9,460	56	8.9	85	122	7.3 / 8.1	1.00[c]		6.5 / 0.28		0.0 / 0.00	64 / 1.05		3.0 / 0.08			0.1			94[e]	22	50	0	4		
7/6 1424	10,800	57	10.4	100	119	7.4 / 8.0	0.91[c]		6.4 / 0.28		0.0 / 0.00	65 / 1.07		1.6 / 0.05			0.0			92[e]	24	46	0	4		
8/8 1055	11,600	56	10.1	96	116	7.3 / 7.9	0.94[c]		6.3 / 0.27		0.0 / 0.00	66 / 1.08		2.4 / 0.07			0.0			89[e]	22	47	0	2		
9/14 1010	7,290	59	9.8	96	119	7.3 / 8.1	12 / 0.60	5.1 / 0.42	5.7 / 0.25	1.0 / 0.03	0.0 / 0.00	64 / 1.05	6.0 / 0.12	3.8 / 0.11	0.2 / 0.00	0.1 / 0.01	0.1	24	Fe 0.10 d Cu 0.01 PO_4 0.05 ABS 0.0	90[f]	19	51	0	3		
10/2 1245	5,890	61	10.0	101	121	7.1 / 7.9	0.96[c]		5.2 / 0.23		0.0 / 0.00	64 / 1.05		1.2 / 0.03			0.1			93[e]	19	48	0	3		
11/9 1250	5,730	57	10.0	96	132	7.4 / 8.1	1.00[c]		7.2 / 0.31		0.0 / 0.00	73 / 1.20		2.5 / 0.07			0.0			102[e]	24	50	0	5		
12/8 0910	5,190	49	10.5	91	149	7.2 / 7.8	1.10[c]		7.9 / 0.34		0.0 / 0.00	68 / 1.11		5.2 / 0.15			0.0			115[e]	24	55	.0	12		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT BEND (STA. 12c)

Date sampled	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/1-9					139	7.8	11 / 0.55	6.1 / 0.50	8.3 / 0.36	2.0 / 0.05	0 / 0.00	72 / 1.18	9.6 / 0.20	3.2 / 0.09	0.2 / 0.00	0.1 / 0.01	0.0	26	Cu 0.02 Fe 0.02 Zn 0.00	102[f] 103[g]	25	52	0			USGS
1/10-19					142	7.8	12 / 0.60	5.6 / 0.46	8.3 / 0.36	1.6 / 0.04	0 / 0.00	75 / 1.23	4.6 / 0.10	3.1 / 0.09	0.2 / 0.00	0.1 / 0.01	0.0	27	Cu 0.02 Fe 0.04 Zn 0.00	100[f] 110[g]	25	53	0			
1/20-29					148	6.0	12 / 0.60	5.8 / 0.48	8.9 / 0.39	1.4 / 0.04	0 / 0.00	78 / 1.28	5.4 / 0.11	4.5 / 0.13	0.4 / 0.01	0.0 / 0.00	0.0	27	Fe 0.05 Cu 0.02 Zn 0.00	103[f] 105[g]	26	54	0			
1/30-31, 2/1-2					110	7.1	9.6 / 0.48	3.9 / 0.32	5.2 / 0.23	1.0 / 0.03	0 / 0.00	48 / 0.79	8.0 / 0.17	2.5 / 0.07	1.6 / 0.03	0.1 / 0.01	0.1	21	Fe 0.21 Cu 0.01 Zn 0.05	77[f] 100[g]	22	40	1			
2/3-8					137	7.6	12 / 0.60	5.4 / 0.44	6.9 / 0.30	1.0 / 0.03	0 / 0.00	64 / 1.05	8.0 / 0.17	3.5 / 0.10	1.2 / 0.02	0.1 / 0.01	0.1	24	Fe 0.13 Cu 0.02 Zn 0.07	94[f] 100[g]	22	52	0			
2/9-16					119	7.8	10 / 0.50	4.9 / 0.40	6.0 / 0.26	1.0 / 0.03	0 / 0.00	58 / 0.95	7.0 / 0.15	3.0 / 0.08	1.3 / 0.02	0.1 / 0.01	0.0	24	Fe 0.13 Cu 0.01 Zn 0.04	86[f] 97[g]	22	45	0			
2/17-28					131	7.7	11 / 0.55	5.7 / 0.47	7.2 / 0.31	1.3 / 0.03	0 / 0.00	68 / 1.11	6.0 / 0.12	3.0 / 0.08	0.8 / 0.01	0.1 / 0.01	0.0	26	Fe 0.09 Cu 0.02 Zn 0.08	94[f] 104[g]	23	51	0			
3/1-10					132	7.5	11 / 0.55	5.7 / 0.47	8.0 / 0.35	1.4 / 0.04	0 / 0.00	70 / 1.15	6.0 / 0.12	3.0 / 0.08	1.0 / 0.02	0.1 / 0.01	0.1	27	Fe 0.05 Cu 0.03 Zn 0.15	97[f] 95[g]	25	51	0			
3/11-20					122	7.5	10 / 0.50	5.6 / 0.46	6.9 / 0.30	1.1 / 0.03	0 / 0.00	63 / 1.03	6.0 / 0.12	3.0 / 0.08	0.8 / 0.01	0.1 / 0.01	0.1	25	Fe 0.13 Cu 0.02 Zn 0.16	90[f] 100[g]	23	48	0			
3/21-31					122	7.5	11 / 0.55	5.0 / 0.41	6.6 / 0.29	1.3 / 0.03	0 / 0.00	64 / 1.05	6.0 / 0.12	2.5 / 0.07	0.7 / 0.01	0.1 / 0.01	0.1	25	Fe 0.01 Cu 0.02 Zn 0.15	90[f] 104[g]	23	48	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT BEND (STA. 12c continued)

Date sampled	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
4/1-10					130	8.0	11 / 0.55	5.5 / 0.45	6.4 / 0.28	1.0 / 0.03	0 / 0.00	62 / 1.02	7.0 / 0.15	3.5 / 0.10	0.3 / 0.00	0.0 / 0.00	0.0	24	Fe 0.04	90[f] 93[g]	21	50	0			ISGS
4/11-20					128	7.8	11 / 0.55	5.5 / 0.45	6.9 / 0.30	1.1 / 0.03	0 / 0.00	63 / 1.03	7.0 / 0.15	3.7 / 0.10	0.3 / 0.00	0.0 / 0.00	0.0	24	Fe 0.04	91[f] 100[g]	23	50	0			
4/21-30					126	7.7	11 / 0.55	4.9 / 0.40	6.9 / 0.30	1.1 / 0.03	0 / 0.00	63 / 1.03	6.0 / 0.12	3.7 / 0.10	0.00 / 0.00	0.0 / 0.00	0.0	24	Fe 0.05	89[f] 92[g]	23	48	0			
5/1-10					125	7.8	12 / 0.60	5.6 / 0.46	6.5 / 0.28	1.1 / 0.03	0 / 0.00	64 / 1.05	7.6 / 0.16	4.1 / 0.12	0.5 / 0.01	0.0 / 0.00	0.0	28	Fe 0.00	97[f] 97[g]	20	53	1			
5/11-20					124	7.7	12 / 0.60	5.4 / 0.44	6.5 / 0.28	1.1 / 0.03	0 / 0.00	64 / 1.05	7.6 / 0.16	3.2 / 0.09	0.4 / 0.01	0.0 / 0.00	0.0	26	Fe 0.00	94[f] 94[g]	21	52	0			
5/21-31					123	7.6	11 / 0.55	6.0 / 0.49	6.5 / 0.28	1.1 / 0.03	0 / 0.00	64 / 1.05	8.0 / 0.17	3.0 / 0.08	0.5 / 0.01	0.2 / 0.01	0.0	25	Fe 0.00	93[f] 93[g]	21	52	0			
6/1-13					123	7.6	11 / 0.55	5.0 / 0.41	6.6 / 0.29	1.1 / 0.03	0 / 0.00	64 / 1.05	6.0 / 0.12	3.4 / 0.10	0.2 / 0.00	0.0 / 0.00	0.0	28	Fe 0.00 Cu 0.01 Zn 0.14	93[f] 96[g]	23	48	0			
6/14-21					124	7.4	12 / 0.60	4.4 / 0.36	6.4 / 0.28	1.4 / 0.04	0 / 0.00	64 / 1.05	7.0 / 0.15	4.4 / 0.12	0.2 / 0.00	0.0 / 0.00	0.0	25	Fe 0.00 Cu 0.01 Zn 0.11	93[f] 93[g]	22	48	0			
6/22-30					123	7.4	12 / 0.60	4.1 / 0.34	6.0 / 0.26	1.1 / 0.03	0 / 0.00	64 / 1.05	4.4 / 0.09	3.9 / 0.11	0.2 / 0.00	0.0 / 0.00	0.0	25	Fe 0.00 Cu 0.03 Zn 0.07	89[f] 90[g]	21	47	0			
7/1-10					121	8.0	11 / 0.55	4.7 / 0.39	6.7 / 0.29	1.2 / 0.03	0 / 0.00	64 / 1.05	5.0 / 0.10	3.5 / 0.10	0.3 / 0.00	0.0 / 0.00	0.0	24	Fe 0.00 Cu 0.01 Zn 0.08	88[f] 89[g]	23	47	0			
7/11-20					119	7.9	11 / 0.55	5.0 / 0.41	6.3 / 0.27	1.2 / 0.03	0 / 0.00	64 / 1.05	4.0 / 0.08	3.2 / 0.09	0.1 / 0.00	0.0 / 0.00	0.0	26	Fe 0.00 Cu 0.02 Zn 0.08	89[f] 93[g]	21	48	0			
7/21-31					119	7.5	11 / 0.55	5.0 / 0.41	6.3 / 0.27	1.2 / 0.03	0 / 0.00	63 / 1.03	5.0 / 0.10	2.2 / 0.06	0.4 / 0.01	0.1 / 0.01	0.0	24	Fe 0.00 Cu 0.01 Zn 0.10	86[f] 87[g]	21	48	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT BEND (STA. 12c continued)

Date sampled	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
8/1-10					121	7.5	10 / 0.50	5.4 / 0.44	5.3 / 0.23	1.3 / 0.03	0 / 0.00	67 / 1.10	4.0 / 0.08	1.8 / 0.05	0.4 / 0.01	0.1 / 0.01	0.0	26	Fe 0.00	87[f] 95[g]	19	47	0			USGS
8/11-20					121	7.7	11 / 0.55	4.7 / 0.39	5.5 / 0.24	1.2 / 0.03	0 / 0.00	67 / 1.10	4.0 / 0.08	2.2 / 0.06	0.4 / 0.01	0.1 / 0.01	0.0	25	Fe 0.00	87[f] 98[g]	20	47	0			
8/21-30					121	7.5	10 / 0.50	5.8 / 0.48	5.4 / 0.23	1.5 / 0.04	0 / 0.00	69 / 1.13	3.0 / 0.06	2.2 / 0.06	0.4 / 0.01	0.1 / 0.01	0.0	25	Fe 0.00	87[f] 96[g]	18	49	0			
9/1-10					123	7.3	11 / 0.55	5.2 / 0.43	5.5 / 0.24	0.8 / 0.02	0 / 0.00	67 / 1.10	3.8 / 0.08	2.6 / 0.07	0.4 / 0.01	0.2 / 0.01	0.0	26	Fe 0.00 Cu 0.01 Zn 0.15	88[f] 89[g]	19	49	0			
9/11-20					124	7.9	12 / 0.60	4.5 / 0.37	6.4 / 0.28	1.0 / 0.03	0 / 0.00	73 / 1.20	2.6 / 0.05	2.6 / 0.07	0.2 / 0.00	0.2 / 0.01	0.0	25	Cu 0.02 Fe 0.00 Zn 0.15	90[f] 100[g]	22	49	0			
9/21-30					122	7.7	11 / 0.55	5.1 / 0.42	6.5 / 0.28	0.8 / 0.02	0 / 0.00	67 / 1.10	4.2 / 0.09	2.5 / 0.07	0.2 / 0.00	0.2 / 0.01	0.0	25	Zn 0.20 Fe 0.00 Cu 0.01	88[f] 89[g]	22	48	0			
10/1-10					125	7.6	11 / 0.55	5.5 / 0.45	5.9 / 0.26	0.9 / 0.02	0 / 0.00	69 / 1.13	5.0 / 0.10	2.5 / 0.07	0.0 / 0.00	0.1 / 0.01	0.0	27	Zn 0.09 Fe 0.05 Cu 0.0	92[f] 87[g]	20	50	0			
10/11-20					124	7.7	11 / 0.55	5.0 / 0.41	5.9 / 0.26	1.0 / 0.03	0 / 0.00	67 / 1.10	4.0 / 0.08	2.0 / 0.06	0.0 / 0.00	0.1 / 0.01	0.0	28	Zn 0.09 Fe 0.05 Cu 0.00	90[f] 83[g]	21	48	0			
10/21-31					128	7.6	11 / 0.55	5.5 / 0.45	6.0 / 0.26	1.0 / 0.03	0 / 0.00	69 / 1.13	4.0 / 0.08	2.2 / 0.06	0.0 / 0.00	0.1 / 0.01	0.0	28	Zn 0.10 Fe 0.05 Cu 0.00	92[f] 79[g]	20	50	0			
11/1-10					134	7.7	12 / 0.60	5.2 / 0.43	7.6 / 0.33	1.4 / 0.04	0 / 0.00	72 / 1.18	5.0 / 0.10	4.5 / 0.13	0.2 / 0.00	0.0 / 0.00	0.0	29	Fe 0.00 Cu 0.01 Zn 0.06	100[f] 98[g]	24	52	0			
11/11-20					137	7.4	12 / 0.60	5.2 / 0.43	7.7 / 0.33	1.6 / 0.04	0 / 0.00	72 / 1.18	3.6 / 0.07	4.4 / 0.12	0.2 / 0.00	0.0 / 0.00	0.0	29	Fe 0.00 Cu 0.01 Zn 0.08	99[f] 100[g]	24	51	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT BEND (STA. 12c continued)

Date sampled	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										
11/21-30					138	7.7	11 / 0.55	6.2 / 0.51	8.0 / 0.35	1.5 / 0.04	0 / 0.00	66 / 1.08	9.0 / 0.19	4.2 / 0.12	0.7 / 0.01	0.0 / 0.00	0.0	27	Fe 0.04 Cu 0.01 Zn 0.09	101[f] 107[g]	24	53	0			USGS
12/1-7					132	7.1	12 / 0.60	4.4 / 0.36	7.1 / 0.31	1.4 / 0.04	0 / 0.00	55 / 0.90	11 / 0.23	5.2 / 0.15	1.9 / 0.03	0.2 / 0.01	0.1	25	Fe 0.12 Cu 0.01 Zn 0.13	95[f] 98[g]	24	48	3			
12/8-19					150	7.4	12 / 0.60	6.3 / 0.52	8.8 / 0.38	1.4 / 0.04	0 / 0.00	73 / 1.20	9.0 / 0.19	4.5 / 0.13	0.7 / 0.01	0.1 / 0.01	0.0	26	Fe 0.04 Cu 0.01 Zn 0.12	105[f] 111[g]	25	56	0			
12/20-31					134	7.7	12 / 0.60	5.8 / 0.48	7.0 / 0.30	1.3 / 0.03	0 / 0.00	62 / 1.02	9.0 / 0.19	4.8 / 0.14	0.9 / 0.01	0.3 / 0.02	0.0	28	Fe 0.12 Cu 0.00 Zn 0.08	100[f] 103[g]	21	54	3			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT BOYERS BEND (STA. 14c)

Date sampled	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/1-10					172	8.2	14 / 0.70	8.1 / 0.67	9.9 / 0.43	0.9 / 0.02	0 / 0.00	92 / 1.51	9.0 / 0.19	5.0 / 0.14	0.4 / 0.01	0.0 / 0.00	0.0	29	Fe 0.03 Cu 0.01 Zn 0.00	121[f] 122[g]	24	68	0			USGS
1/11-20					178	8.2	14 / 0.70	7.8 / 0.64	12 / 0.52	0.9 / 0.02	0 / 0.00	95 / 1.56	7.2 / 0.15	4.8 / 0.14	0.4 / 0.01	0.0 / 0.00	0.0	29	Fe 0.03 Cu 0.01 Zn 0.00	123[f] 125[g]	28	67	0			
1/21-30					179	7.9	14 / 0.70	7.5 / 0.62	12 / 0.52	0.9 / 0.02	0 / 0.00	93 / 1.52	7.2 / 0.15	5.3 / 0.15	0.4 / 0.01	0.0 / 0.00	0.0	28	Fe 0.03 Cu 0.01 Zn 0.00	121[f] 122[g]	28	66	0			
1/31, 2/1-6					126	7.7	12 / 0.60	4.9 / 0.40	5.9 / 0.26	1.0 / 0.03	0 / 0.00	58 / 0.95	9.0 / 0.19	3.3 / 0.09	1.1 / 0.02	0.0 / 0.00	0.1	20	Fe 0.23	87[f] 93[g]	20	50	2			
2/7-10					157	7.5	14 / 0.70	6.1 / 0.50	7.6 / 0.33	1.1 / 0.03	0 / 0.00	74 / 1.21	10 / 0.21	3.8 / 0.11	1.0 / 0.02	0.0 / 0.00	0.1	23	Fe 0.14	103[f] 108[g]	21	60	0			
2/11-18					122	7.7	11 / 0.55	4.7 / 0.39	6.1 / 0.27	0.8 / 0.02	0 / 0.00	58 / 0.95	7.6 / 0.16	3.0 / 0.08	0.7 / 0.01	0.0 / 0.00	0.1	22	Fe 0.15	85[f] 91[g]	22	47	0			
2/19-28					142	7.9	13 / 0.65	5.5 / 0.45	7.4 / 0.32	1.1 / 0.03	0 / 0.00	70 / 1.15	8.0 / 0.17	3.2 / 0.09	0.4 / 0.01	0.0 / 0.00	0.1	25	Fe 0.10	98[f] 100[g]	22	55	0			
3/1-10					146	7.8	12 / 0.60	6.8 / 0.56	8.9 / 0.39	1.0 / 0.03	0 / 0.00	80 / 1.31	6.0 / 0.12	4.0 / 0.11	0.7 / 0.01	0.1 / 0.01	0.1	29	Fe 0.08	108[f] 94[g]	25	58	0			
3/11-20					131	7.7	11 / 0.55	6.2 / 0.51	7.5 / 0.33	1.0 / 0.03	0 / 0.00	69 / 1.13	6.0 / 0.12	4.0 / 0.11	0.8 / 0.01	0.1 / 0.01	0.1	26	Fe 0.14	97[f] 92[g]	23	53	0			
3/21-31					132	7.9	12 / 0.60	5.6 / 0.46	7.5 / 0.33	1.0 / 0.03	0 / 0.00	71 / 1.16	8.0 / 0.17	3.5 / 0.10	0.7 / 0.01	0.1 / 0.01	0.1	26	Fe 0.01	100[f] 105[g]	23	53	0			
4/1-10					148	8.0	12 / 0.60	6.8 / 0.56	7.3 / 0.32	1.1 / 0.03	0 / 0.00	72 / 1.18	7.0 / 0.15	5.0 / 0.14	0.7 / 0.01	0.0 / 0.00	0.1	26	Fe 0.04	101[f] 104[g]	21	58	0			
4/11-20					156	8.1	14 / 0.70	6.4 / 0.53	9.3 / 0.40	0.9 / 0.02	0 / 0.00	79 / 1.29	7.6 / 0.16	5.2 / 0.15	0.4 / 0.01	0.0 / 0.00	0.0	27	Fe 0.04	110[f] 107[g]	24	62	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT BOYERS BEND (STA. 14c continued)

Date sampled	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
4/21-30					150	8.1	13 / 0.65	6.3 / 0.52	8.4 / 0.37	0.9 / 0.02	0 / 0.00	74 / 1.21	7.4 / 0.15	6.0 / 0.17	0.1 / 0.00	0.0 / 0.00	0.1	26	Fe 0.04	104[f] 108[g]	24	58	0			USGS
5/1-10					150	7.9	14 / 0.70	6.8 / 0.56	8.0 / 0.35	1.1 / 0.03	0 / 0.00	76 / 1.25	8.0 / 0.17	4.9 / 0.14	0.4 / 0.01	0.1 / 0.01	0.0	27	Fe 0.00	107[f] 107[g]	21	63	1			
5/11-20					154	7.9	14 / 0.70	6.8 / 0.56	8.0 / 0.35	1.1 / 0.03	0 / 0.00	78 / 1.28	8.0 / 0.17	5.1 / 0.14	0.4 / 0.01	0.0 / 0.00	0.0	30	Fe 0.00	111[f] 112[g]	21	63	0			
5/21-31					158	8.0	14 / 0.70	7.1 / 0.58	8.5 / 0.37	1.2 / 0.03	0 / 0.00	83 / 1.34	6.0 / 0.12	5.0 / 0.14	0.5 / 0.01	0.1 / 0.01	0.0	29	Fe 0.00	111[f] 111[g]	22	64	0			
6/1-10					152	8.1	13 / 0.65	6.6 / 0.54	8.3 / 0.36	1.2 / 0.03	0 / 0.00	79 / 1.29	6.6 / 0.14	4.5 / 0.13	0.3 / 0.00	0.0 / 0.00	0.1	28	Fe 0.00 Cu 0.01 Zn 0.07	108[f] 107[g]	23	59	0			
6/11-20					146	8.1	13 / 0.65	6.0 / 0.49	7.8 / 0.34	1.3 / 0.03	0 / 0.00	75 / 1.23	6.0 / 0.12	4.2 / 0.12	0.3 / 0.00	0.0 / 0.00	0.1	28	Fe 0.00 Cu 0.01 Zn 0.04	104[f] 107[g]	23	57	0			
6/21-30					137	8.0	13 / 0.65	4.9 / 0.40	7.2 / 0.31	1.1 / 0.03	0 / 0.00	72 / 1.18	5.6 / 0.12	4.5 / 0.13	0.4 / 0.01	0.0 / 0.00	0.1	28	Fe 0.00 Cu 0.01 Zn 0.09	100[f] 104[g]	22	53	0			
7/1-10					137	7.7	13 / 0.65	5.0 / 0.41	7.7 / 0.33	1.1 / 0.03	0 / 0.00	72 / 1.18	6.0 / 0.12	4.2 / 0.12	0.2 / 0.00	0.0 / 0.00	0.0	27	Fe 0.00	99[f] 102[g]	23	53	0			
7/11-20					134	8.1	12 / 0.60	5.4 / 0.44	7.1 / 0.31	1.2 / 0.03	0 / 0.00	70 / 1.15	5.0 / 0.10	3.5 / 0.10	0.3 / 0.00	0.0 / 0.00	0.0	26	Fe 0.00	94[f] 95[g]	22	52	0			
7/21-31					131	8.0	12 / 0.60	5.1 / 0.42	7.1 / 0.31	1.1 / 0.03	0 / 0.00	70 / 1.15	6.0 / 0.12	3.4 / 0.10	0.1 / 0.00	0.0 / 0.00	0.0	26	Fe 0.00	95[f] 95[g]	23	51	0			
8/1-10					133	7.9	11 / 0.55	6.4 / 0.53	6.5 / 0.28	1.3 / 0.03	0 / 0.00	73 / 1.20	5.0 / 0.10	3.0 / 0.08	0.5 / 0.01	0.1 / 0.01	0.0	28	Fe 0.00	98[f] 104[g]	20	54	0			
8/11-20					135	7.9	11 / 0.55	6.0 / 0.49	6.5 / 0.28	1.2 / 0.03	0 / 0.00	74 / 1.21	4.0 / 0.08	3.0 / 0.08	0.8 / 0.01	0.1 / 0.01	0.0	28	Fe 0.00	97[f] 106[g]	21	52	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT BOYERS BEND (STA. 14c continued)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
8/21-31					142	7.6	12 / 0.60	6.3 / 0.52	6.8 / 0.30	1.5 / 0.04	0 / 0.00	79 / 1.29	4.0 / 0.08	3.2 / 0.09	0.5 / 0.01	0.1 / 0.01	0.0	27	Fe 0.00	100[f] 108[g]	21	56	0			USGS
9/1-10					151	7.7	14 / 0.70	5.6 / 0.46	7.6 / 0.33	0.9 / 0.02	0 / 0.00	82 / 1.34	5.0 / 0.10	4.0 / 0.11	0.0 / 0.00	0.1 / 0.01	0.1	26	Fe 0.00	103[f] 104[g]	22	58	0			
9/11-20					154	7.9	14 / 0.70	6.0 / 0.49	9.1 / 0.40	0.6 / 0.02	0 / 0.00	85 / 1.39	4.6 / 0.10	4.0 / 0.11	0.1 / 0.00	0.2 / 0.01	0.0	28	Fe 0.00	109[f] 113[g]	25	60	0			
9/21-30					150	8.1	13 / 0.65	6.1 / 0.50	8.6 / 0.37	1.1 / 0.03	0 / 0.00	81 / 1.33	3.6 / 0.07	4.4 / 0.12	0.3 / 0.00	0.2 / 0.01	0.0	37	Fe 0.00	114[f] 115[g]	24	57	0			
10/1-10					150	8.0	12 / 0.60	6.8 / 0.56	7.5 / 0.33	1.1 / 0.03	0 / 0.00	82 / 1.34	4.0 / 0.08	3.2 / 0.09	0.0 / 0.00	0.1 / 0.01	0.0	28	Fe 0.05	103[f] 101[g]	22	58	0			
10/11-20					147	7.7	13 / 0.65	6.2 / 0.51	7.4 / 0.32	1.0 / 0.03	0 / 0.00	79 / 1.29	4.0 / 0.08	3.5 / 0.10	0.0 / 0.00	0.0 / 0.00	0.0	30	Fe 0.06	104[f] 75[g]	21	58	0			
10/21-31					148	7.7	12 / 0.60	6.8 / 0.56	7.4 / 0.32	1.1 / 0.03	0 / 0.00	78 / 1.28	5.0 / 0.10	3.8 / 0.11	0.0 / 0.00	0.1 / 0.01	0.0	29	Fe 0.05	103[f] 99[g]	21	58	0			
11/1-10					155	7.9	14 / 0.70	6.1 / 0.50	9.3 / 0.40	1.6 / 0.04	0 / 0.00	80 / 1.31	6.0 / 0.12	5.2 / 0.15	0.3 / 0.00	0.0 / 0.00	0.0	30	Fe 0.00	112[f] 101[g]	24	60	0			
11/11-20					159	7.7	14 / 0.70	6.2 / 0.51	9.6 / 0.42	1.5 / 0.04	0 / 0.00	82 / 1.34	5.0 / 0.10	6.0 / 0.17	0.3 / 0.00	0.0 / 0.00	0.0	29	Fe 0.00	112[f] 109[g]	25	61	0			
11/21-30					154	7.7	13 / 0.65	6.1 / 0.50	9.2 / 0.40	1.5 / 0.04	0 / 0.00	73 / 1.20	8.4 / 0.17	5.5 / 0.16	0.9 / 0.01	0.0 / 0.00	0.0	28	Fe 0.02	109[f] 104[g]	25	58	0			
12/1-7					128	7.2	10 / 0.50	5.6 / 0.46	7.1 / 0.31	1.4 / 0.04	0 / 0.00	52 / 0.85	11 / 0.23	5.2 / 0.15	2.4 / 0.04	0.2 / 0.01	0.1	23	Fe 0.16	92[f] 106[g]	24	48	5			
12/8-20					174	7.9	14 / 0.70	7.3 / 0.60	11 / 0.48	1.6 / 0.04	0 / 0.00	84 / 1.38	9.0 / 0.19	6.2 / 0.17	1.0 / 0.02	0.2 / 0.01	0.0	27	Fe 0.06	118[f] 120[g]	26	65	0			
12/21-31					150	7.8	13 / 0.65	5.7 / 0.47	8.8 / 0.38	1.4 / 0.04	0 / 0.00	69 / 1.13	10 / 0.21	6.2 / 0.17	1.1 / 0.02	0.2 / 0.01	0.1	24	Fe 0.13	105[f] 117[g]	25	56	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT BUTTE CITY (STA. 87a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/3 1545	6,050	47	11.7	99	159	7.4/7.5	1.24[c]		8.9/0.39		0.0/0.00	76/1.25		4.5/0.13			0.1			113[e]	24	62	0	17	Median 23.	USGS
2/16 1330	31,900	51	10.6	95	128	7.3/7.9	1.02[c]		6.2/0.27		0.0/0.00	67/1.10		3.2/0.09			0.1			91[e]	21	51	0	70	Maximum 620.	
3/2 1130	16,000	53	10.4	95	144	7.4/8.0	1.10[c]		7.5/0.33		0.0/0.00	72/1.18		2.6/0.07			0.1			101[e]	23	55	0	20	Minimum 2.3	
4/11 1550	8,820	62	9.5	97	144	7.4/7.9	1.14[c]		8.6/0.37		0.0/0.00	73/1.20		3.0/0.08			0.1			103[e]	25	57	0	10		
5/2 1540	7,400	60	10.4	104	137	7.5/8.1	12/0.60	5.1/0.42	7.3/0.32	4.7/0.12	0.0/0.00	72/1.18	5.0/0.10	3.8/0.11	0.4/0.01	0.1/0.01	0.0	24	Fe 0.05 Al 0.07 PO_4 0.05 ABS 0.0 d	97[f]	22	51	0	2		
6/8 1100	7,710	64	7.9	82	132	7.5/7.9	1.08[c]		6.8/0.30		0.0/0.00	70/1.15		4.0/0.11			0.0			94[e]	22	54	0	11		
7/7 1114	7,930	64	8.8	92		7.4		SAMPLE BROKEN IN TRANSIT																		
8/10 0835	8,770	65	9.2	97	122	7.5/8.0	0.96[c]		5.9/0.26		0.0/0.00	66/1.08		5.2/0.15			0.1			87[e]	21	48	0	7		
9/7 1100	6,420	64	9.3	97	137	7.5/8.0	12/0.60	5.4/0.44	6.8/0.30	1.1/0.03	0.0/0.00	74/1.21	4.6/0.10	2.6/0.07	0.1/0.00	0.2/0.01	0.0	24	Fe 0.07 PO_4 0.05 Zn 0.03 ABS 0.0 d	93[f]	22	52	0	5		
10/10 1110	5,130	59	9.4	92	135	7.5/7.9	1.06[c]		6.7/0.29		0.0/0.00	72/1.18		4.0/0.11			0.0			96[e]	21	53	0	10		
11/17 0910	5,070	50	10.8	96	149	7.4/8.0	1.11[c]		8.4/0.37		0.0/0.00	81/1.33		4.0/0.11			0.1			106[e]	25	56	0	3		
12/8 0905	6,420	49	10.2	89	165	7.3/7.9	1.26[c]		8.1/0.35		0.0/0.00	73/1.20		5.2/0.15			0.1			117[e]	22	63	3	15		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT BUTTE CITY (STA. 87a)

Date sampled	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										
1/4-9					159	7.7	13 / 0.65	8.5 / 0.70	9.1 / 0.40	0.9 / 0.02	0 / 0.00	102 / 1.67	3.6 / 0.07	1.8 / 0.05	0.3 / 0.00	0.1 / 0.01	0.1	27	Cu 0.02 Zn 0.00 Fe 0.06	114[f] 116[g]	23	68	0			USGS
1/10-19					161	7.9	13 / 0.65	7.1 / 0.58	9.8 / 0.43	1.6 / 0.04	0 / 0.00	84 / 1.38	7.6 / 0.16	4.6 / 0.13	0.4 / 0.01	0.1 / 0.01	0.0	28	Cu 0.02 Fe 0.02 Zn 0.00	113[f] 121[g]	25	61	0			
1/20-29					164	8.1	14 / 0.70	6.3 / 0.52	9.8 / 0.43	1.6 / 0.04	0 / 0.00	87 / 1.43	6.0 / 0.12	4.8 / 0.14	0.6 / 0.01	0.2 / 0.01	0.0	28	Cu 0.02 Fe 0.04 Zn 0.00	114[f] 116[g]	25	61	0			
1/30-31, 2/1-3					127	7.1	11 / 0.55	5.7 / 0.47	6.0 / 0.26	1.3 / 0.03	0 / 0.00	57 / 0.93	10 / 0.21	3.5 / 0.10	1.3 / 0.02	0.1 / 0.01	0.1	19	Fe 0.19	86[f] 95[g]	20	51	4			
2/4-9					154	7.3	14 / 0.70	6.3 / 0.52	7.3 / 0.32	1.0 / 0.03	0 / 0.00	70 / 1.15	12 / 0.25	3.3 / 0.09	1.1 / 0.02	0.0 / 0.00	0.2	24	Fe 0.10	103[f] 104[g]	20	61	4			
2/10-19					126	7.6	12 / 0.60	5.1 / 0.42	6.1 / 0.27	1.0 / 0.03	0 / 0.00	62 / 1.02	8.0 / 0.17	3.0 / 0.08	0.9 / 0.01	0.0 / 0.00	0.1	24	Fe 0.13	91[f] 91[g]	20	51	0			
2/20-28					142	7.9	12 / 0.60	6.3 / 0.52	7.7 / 0.33	1.3 / 0.03	0 / 0.00	72 / 1.18	8.0 / 0.17	2.5 / 0.07	0.7 / 0.01	0.0 / 0.00	0.1	26	Fe 0.06	100[f] 100[g]	22	56	0			
3/1-9					144	7.7	12 / 0.60	6.3 / 0.52	8.5 / 0.37	1.4 / 0.04	0 / 0.00	78 / 1.28	7.0 / 0.15	4.0 / 0.11	0.9 / 0.01	0.1 / 0.01	0.1	28	Fe 0.07	106[f] 86[g]	24	56	0			
3/10-20					132	7.8	12 / 0.60	5.4 / 0.44	7.9 / 0.34	1.4 / 0.04	0 / 0.00	69 / 1.13	6.0 / 0.12	3.5 / 0.10	1.0 / 0.02	0.1 / 0.01	0.1	27	Fe 0.12	99[f] 88[g]	24	52	0			
3/21-31					130	7.6	11 / 0.55	5.5 / 0.45	7.3 / 0.32	1.0 / 0.03	0 / 0.00	67 / 1.10	6.0 / 0.12	3.5 / 0.10	1.0 / 0.02	0.1 / 0.01	0.1	26	Fe 0.13	95[f] 87[g]	24	50	0			
4/1-10					146	7.7	12 / 0.60	6.2 / 0.51	8.4 / 0.37	1.4 / 0.04	0 / 0.00	70 / 1.15	7.4 / 0.15	5.6 / 0.16	0.2 / 0.00	0.0 / 0.00	0.1	23	Fe 0.02	98[f] 108[g]	24	56	0			
4/11-20					149	7.8	13 / 0.65	5.8 / 0.48	8.2 / 0.36	1.1 / 0.03	0 / 0.00	73 / 1.20	7.6 / 0.16	5.0 / 0.14	0.2 / 0.00	0.0 / 0.00	0.1	25	Fe 0.03	102[f] 111[g]	24	57	0			

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT BUTTE CITY (STA. 87a continued)

Date sampled	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										
4/21-30					141	8.1	12 / 0.60	6.1 / 0.50	8.2 / 0.36	1.1 / 0.03	0 / 0.00	70 / 1.15	7.0 / 0.15	5.1 / 0.14	0.5 / 0.01	0.0 / 0.00	0.0	25	Fe 0.03	99[f] 94[g]	24	55	0			USGS
5/1-10					141	7.6	12 / 0.60	6.6 / 0.54	7.5 / 0.33	1.3 / 0.03	0 / 0.00	72 / 1.18	10 / 0.21	5.2 / 0.15	0.3 / 0.00	0.0 / 0.00	0.0	24	Fe 0.00	102[f] 104[g]	22	57	0			
5/11-20					141	7.8	13 / 0.65	6.4 / 0.53	7.6 / 0.33	1.2 / 0.03	0 / 0.00	70 / 1.15	9.0 / 0.19	5.6 / 0.16	0.9 / 0.01	0.1 / 0.01	0.0	25	Fe 0.00	103[f] 103[g]	21	59	2			
5/22-31					141	7.8	13 / 0.65	5.7 / 0.47	7.6 / 0.33	1.2 / 0.03	0 / 0.00	72 / 1.18	6.0 / 0.12	4.2 / 0.12	0.5 / 0.01	0.0 / 0.00	0.0	28	Fe 0.00	101[f] 102[g]	22	56	0			
6/1-10					137	8.0	12 / 0.60	5.8 / 0.48	7.0 / 0.30	1.3 / 0.03	0 / 0.00	71 / 1.16	6.0 / 0.12	5.5 / 0.16	0.4 / 0.01	0.0 / 0.00	0.1	28	Fe 0.00 Cu 0.01 Zn 0.00	101[f] 105[g]	21	54	0			
6/11-20					139	7.9	12 / 0.60	5.6 / 0.46	7.1 / 0.31	1.4 / 0.04	0 / 0.00	71 / 1.16	6.0 / 0.12	3.8 / 0.11	0.5 / 0.01	0.0 / 0.00	0.1	27	Fe 0.00 Cu 0.01 Zn 0.01	98[f] 102[g]	22	53	0			
6/21-30					134	7.9	12 / 0.60	5.4 / 0.44	7.0 / 0.30	1.4 / 0.04	0 / 0.00	69 / 1.13	5.6 / 0.12	4.5 / 0.13	0.4 / 0.01	0.1 / 0.01	0.0	29	Fe 0.00 Cu 0.01 Zn 0.00	99[f] 98[g]	22	52	0			
7/1-10					130	8.0	12 / 0.60	4.9 / 0.40	7.1 / 0.31	1.2 / 0.03	0 / 0.00	69 / 1.13	6.0 / 0.12	3.8 / 0.11	0.2 / 0.00	0.0 / 0.00	0.0	26	Fe 0.00	95[f] 96[g]	23	50	0			
7/11-19					128	7.7	11 / 0.55	5.1 / 0.42	7.0 / 0.30	1.3 / 0.03	0 / 0.00	67 / 1.10	5.0 / 0.10	3.4 / 0.10	0.2 / 0.00	0.1 / 0.01	0.1	25	Fe 0.00	91[f] 91[g]	23	48	0			
7/21-31					126	7.8	12 / 0.60	4.1 / 0.34	7.0 / 0.30	1.2 / 0.03	0 / 0.00	67 / 1.10	5.0 / 0.10	3.4 / 0.10	0.1 / 0.00	0.0 / 0.00	0.0	25	Fe 0.00	91[f] 91[g]	24	47	0			
8/1-10					129	7.8	11 / 0.55	5.2 / 0.43	6.0 / 0.26	1.2 / 0.03	0 / 0.00	69 / 1.13	3.0 / 0.06	2.8 / 0.08	0.6 / 0.01	0.1 / 0.01	0.0	26	Fe 0.00	90[f] 101[g]	20	49	0			
8/11-20					129	7.7	10 / 0.50	6.3 / 0.52	5.9 / 0.26	1.2 / 0.03	0 / 0.00	71 / 1.16	5.0 / 0.10	2.2 / 0.06	0.5 / 0.01	0.1 / 0.01	0.0	27	Fe 0.00	93[f] 101[g]	20	51	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT BUTTE CITY (STA. 87a continued)

Date sampled	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in ppm / equivalents per million																			
1961																										
8/21-31					129	7.8	11 / 0.55	5.7 / 0.47	5.9 / 0.26	1.2 / 0.03	0 / 0.00	71 / 1.16	4.0 / 0.08	2.2 / 0.06	0.5 / 0.01	0.1 / 0.01	0.0	27	Fe 0.00	93[f] 96[g]	20	51	0			USGS
9/1-6					136	7.3	12 / 0.60	5.6 / 0.46	6.6 / 0.29	0.8 / 0.02	0 / 0.00	74 / 1.21	0.6 / 0.01	3.6 / 0.10	0.3 / 0.00	0.2 / 0.01	0.0	26	Fe 0.00	92[f] 103[g]	21	53	0			
9/17-30					137	7.6	12 / 0.60	5.6 / 0.46	6.6 / 0.29	0.9 / 0.02	0 / 0.00	74 / 1.21	5.0 / 0.10	3.3 / 0.09	0.2 / 0.00	0.1 / 0.01	0.0	29	Fe 0.00	99[f] 99[g]	21	53	0			
10/2-10					143	7.5	12 / 0.60	5.8 / 0.48	7.6 / 0.33	1.4 / 0.04	0 / 0.00	75 / 1.23	5.0 / 0.10	2.8 / 0.08	0.0 / 0.00	0.0 / 0.00	0.0	28	Fe 0.05	100[f] 94[g]	23	54	0			
10/11-20					140	7.6	12 / 0.60	6.1 / 0.50	7.1 / 0.31	1.2 / 0.03	0 / 0.00	75 / 1.23	4.0 / 0.08	2.8 / 0.08	0.0 / 0.00	0.1 / 0.01	0.0	28	Fe 0.05	98[f] 91[g]	22	55	0			
10/21-31					141	7.7	12 / 0.60	6.1 / 0.50	7.1 / 0.31	1.2 / 0.03	0 / 0.00	76 / 1.25	4.0 / 0.08	2.5 / 0.07	0.0 / 0.00	0.1 / 0.01	0.0	28	Fe 0.05	98[f] 90[g]	22	55	0			
11/1-10					149	7.6	13 / 0.65	6.2 / 0.51	8.5 / 0.37	1.6 / 0.04	0 / 0.00	77 / 1.26	5.6 / 0.12	4.2 / 0.12	0.5 / 0.01	0.0 / 0.00	0.0	29	Fe 0.00	107[f] 111[g]	24	58	0			
11/12-18, 11/24,27					152	7.8	14 / 0.70	5.7 / 0.47	9.2 / 0.40	1.6 / 0.04	0 / 0.00	76 / 1.25	7.0 / 0.15	4.8 / 0.14	0.6 / 0.01	0.0 / 0.00	0.0	29	Fe 0.01	109[f] 107[g]	25	59	0			
12/1-7					138	7.1	11 / 0.55	5.7 / 0.47	7.5 / 0.33	1.4 / 0.04	0 / 0.00	58 / 0.95	11 / 0.23	5.8 / 0.16	2.4 / 0.04	0.2 / 0.01	0.1	25	Fe 0.07	99[f] 103[g]	24	51	3			
12/8-20					167	7.6	14 / 0.70	6.6 / 0.54	10 / 0.44	1.5 / 0.04	0 / 0.00	80 / 1.31	10 / 0.21	5.5 / 0.16	1.1 / 0.02	0.2 / 0.01	0.0	26	Fe 0.04	114[f] 119[g]	26	62	0			
12/21-31					154	7.2	13 / 0.65	6.2 / 0.51	9.0 / 0.39	1.4 / 0.04	0 / 0.00	72 / 1.18	9.0 / 0.19	6.0 / 0.17	1.1 / 0.02	0.2 / 0.01	0.1	27	Fe 0.08	108[f] 110[g]	25	58	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT COLUSA (STA. 13b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/3 1615	6,050	46	11.2	94	162	7.3/7.4	1.24[c]		9.0/0.39		0.0/0.00	80/1.31		4.5/0.13			0.0			119[e]	24	62	0	3		
2/16 1425	28,300	53	10.5	96	140	7.3/7.9	1.12[c]		6.6/0.29		0.0/0.00	67/1.10		3.0/0.08			0.0			103[e]	21	56	1	25		
3/2 0930	17,000	52	10.4	95	150	7.3/7.9	1.10[c]		9.8/0.43		0.0/0.00	79/1.29		3.2/0.09			0.0			110[e]	28	55	0	60		
4/11 1640	8,950	62	9.4	96	146	7.3/8.0	1.16[c]		6.9/0.30		0.0/0.00	77/1.26		3.5/0.10			0.0			107[e]	21	58	0	20		
5/2 1620	6,930	62	9.8	100	139	7.3/7.9	12/0.60	6.3/0.52	7.5/0.33	1.3/0.03	0.0/0.00	77/1.26	6.2/0.13	3.0/0.08	0.0/0.00	0.1/0.01	0.1	22	Fe 0.10 Al 0.05 Cu 0.01 PO_4 0.00 ABS 0.0 [d]	97[f]	22	56	0	15		
6/8 1145	7,290	67	8.0	86	138	7.5/8.0	1.14[c]		7.9/0.34		0.0/0.00	73/1.20		3.9/0.11			0.0			102[e]	23	57	0	35		
7/7 1245	7,100	67	9.0	97	131	7.4/7.9	1.01[c]		7.2/0.31		0.0/0.00	72/1.18		1.8/0.05			0.0			96[e]	23	51	0	15		
8/10 0915	7,890	67	9.1	98	123	7.7/7.9	0.99[c]		6.3/0.27		0.0/0.00	66/1.08		2.8/0.08			0.1			91[e]	21	50	0	6		
9/8 0740	6,240	64	9.0	94	131	7.3/8.0	12/0.60	5.6/0.46	7.1/0.31	1.3/0.03	0.0/0.00	71/1.16	5.0/0.10	3.5/0.10	0.4/0.01	0.1/0.01	0.0	28	Fe 0.16 Cu 0.01 [d] Mn 0.08 Zn 0.01 PO_4 0.05 ABS 0.0	98[f]	22	53	0	8		
10/10 1325	4,820	60	9.6	96	137	7.6/8.0	1.10[c]		6.3/0.27		0.0/0.00	76/1.25		3.0/0.08			0.1			101[e]	20	55	0	5		
11/10 1020	4,980	55	10.2	96	147	7.5/7.9	1.14[c]		8.0/0.35		0.0/0.00	79/1.29		3.5/0.10			0.0			108[e]	23	57	0	4		
12/8 1005	7,500	49	10.1	88	161	7.2/7.6	1.22[c]		8.8/0.38		0.0/0.00	72/1.18		7.0/0.20			0.0			118[e]	24	61	2	25		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER ABOVE COLUSA TROUGH (STA. 14b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/4 1400	7,300	44	10.4	85	170	7.1 / 8.0	1.34[c]		9.3 / 0.40		0.0 / 0.00	85 / 1.39		5.2 / 0.15			0.1			114[e]	23	67	0	8	Median 23.	
2/8 1650	13,400	54	8.8	81	155	7.0 / 7.2	1.13[c]		9.9 / 0.43		0.0 / 0.00	60 / 0.98		4.7 / 0.13			0.1			104[e]	28	56	7	170	Maximum 7,000.+	
3/13 1100	19,800	52	10.5	95	134	7.3 / 7.9	1.04[c]		8.1 / 0.35		0.0 / 0.00	70 / 1.15		2.3 / 0.06			0.1			90[e]	25	52	0	30	Minimum 1.3	
4/6 1100	7,600	62	10.2	104	141	7.3 / 7.7	1.19[c]		4.4 / 0.19		0.0 / 0.00	72 / 1.18		5.2 / 0.15			0.0			95[e]	14	60	1	15		
5/4 1330	12,300	62	9.1	93	166	7.5 / 7.9	14 / 0.70	6.6 / 0.54	11 / 0.48	2.3 / 0.06	0.0 / 0.00	79 / 1.29	9.4 / 0.20	7.6 / 0.21	0.3 / 0.00	0.0 / 0.00	0.0	23	Fe 0.06 Al 0.05 Cu 0.02 PO_4 0.10 ABS 0.0 [d]	113[f]	27	62	0	20		
6/13 0800	5,820	70	8.4	93	175	7.6 / 8.2	1.34[c]		11 / 0.48		0.0 / 0.00	86 / 1.41		5.4 / 0.15			0.0			117[e]	26	67	0	15		
7/6 0815	5,230	72	8.5	97	153	7.5 / 8.1	1.14[c]		9.9 / 0.43		0.0 / 0.00	75 / 1.23		5.5 / 0.16			0.0			103[e]	27	57	0	12		
8/10 1135	7,600	70	8.4	93	158	7.5 / 7.9	1.17[c]		11 / 0.48		0.0 / 0.00	78 / 1.28		5.2 / 0.15			0.1			106[e]	29	59	0	15		
9/8 0835	6,650	67	8.5	91	198	7.4 / 7.9	14 / 0.70	8.3 / 0.68	14 / 0.61	1.1 / 0.03	0.0 / 0.00	97 / 1.59	12 / 0.25	8.0 / 0.23	0.3 / 0.00	0.1 / 0.01	0.1	24	Fe 0.18 ABS 0.0 Al 0.02 PO_4 0.20 [d]	130[f]	30	69	0	15		
10/10 1540	4,970	60	9.4	94	146	7.5 / 8.0	1.14[c]		6.8 / 0.30		0.0 / 0.00	78 / 1.28		2.0 / 0.06			0.2			98[e]	21	57	0	15		
11/17 1140	5,290	52	10.5	95	156	7.5 / 8.1	1.16[c]		9.0 / 0.39		0.0 / 0.00	82 / 1.34		4.5 / 0.13			0.1			105[e]	25	58	0	5		
12/8 1145	10,670	49	9.8	85	155	7.2 / 7.7	1.22[c]		7.9 / 0.34		0.0 / 0.00	68 / 1.11		6.8 / 0.19			0.0			104[e]	22	61	5	60		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT DELTA (STA. 11)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in ppm / equivalents per million																			
1961																										
1/11 0945	570	42	11.8	94	111	7.2/7.6	—/1.22[c]		6.9/0.30		0.0/0.00	86/1.41		4.0/0.11			0.0			79[e]	20	61	0	15	Median 2.3	USGS
2/14 0905	3,620	46	11.7	98	74.6	7.2/7.8	—/0.64[c]		2.6/0.11		0.0/0.00	40/0.66		0.2/0.01			0.0			53[e]	15	32	0	0	Maximum 230.	
3/7 0850	948	42	12.2	97	96.9	7.3/7.9	—/0.84[c]		4.5/0.20		0.0/0.00	50/0.82		1.8/0.05			0.0			69[e]	19	42	1	3	Minimum 0.06	
4/11 0945	1,660	48	11.6	100	86	7.3/8.0	—/0.80[c]		2.5/0.11		0.0/0.00	51/0.84		1.8/0.05			0.0			61[e]	12	40	0	6		
5/9 0800	1,510	51	10.3	92	81	7.4/7.6	5.8/0.29	5.8/0.48	2.7/0.12	0.3/0.01	0.0/0.00	49/0.80	0.0/0.00	2.8/0.08	0.0/0.00	0.0/0.00	0.0	17	Al 0.07 Cu 0.01 d PO_4 0.05 Zn 0.01 ABS 0.0	58[f]	13	38	0	5		
6/14 1025	902	62	9.1	93	93	7.5/7.9	—/0.92[c]		3.6/0.16		0.0/0.00	50/0.82		1.9/0.05			0.0			66[e]	15	46	5	8		
7/12 1330	299	74	8.7	101	134	7.4/8.1	—/0.98[c]		8.4/0.37		0.0/0.00	74/1.21		4.3/0.12			0.1			96[e]	27	49	0	5		
8/2 0515	226	64	8.5	89	144	7.3/8.0	—/1.12[c]		9.6/0.42		0.0/0.00	77/1.26		7.0/0.20			0.1			103[e]	27	56	0	2		
9/11 1345	200	66	9.4	100	152	8.1/8.3	11/0.55	6.4/0.53	11/0.48	1.0/0.03	1/0.03	76/1.25	3.0/0.06	10/0.28	0.2/0.00	0.1/0.01	0.2	31	Fe 0.08 Cu 0.01 Mn 0.03 ABS 0.0 PO_4 0.10 Tot. Alk. 78 d	112[f]	30	54	0	6		
10/3 0915	200	56	10.4	99	152	7.5/8.1	—/1.10[c]		12/0.52		0.0/0.00	78/1.28		6.8/0.19			0.2			109[e]	32	55	0	4		
11/13 1400	232	46	11.2	94	148	8.0/8.0	—/1.04[c]		11/0.48		0.0/0.00	79/1.29		7.0/0.20			0.1			106[e]	32	52	0	6		
12/4 1500	1,130	45			96	7.3/7.7	—/0.78[c]		3.8/0.17		0.0/0.00	48/0.79		3.5/0.10			0.0			69[e]	18	39	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT FREEPORT (STA. 15b)

Date and time sampled P.S.T.	Discharge in cfs Daily Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 230.	USGS
1/9 0750	12,700	45	11.5	95	168	7.3/7.6	1.28[c]		9.9/0.43		0/0.00	78/1.28		6.5/0.18			0.0			111[e]	25	64	0	10	Maximum > 7000.	
2/13 0835	48,500	52	9.8	88	123	7.1/7.4	0.91[c]		7.4/0.32		0/0.00	53/0.87		3.8/0.11			0.1			81[e]	26	45	2	150	Minimum 0.046	
3/6 0800	21,600	50	10.3	91	163	7.3/7.9	1.26[c]		10/0.44		0/0.00	81/1.33		8.0/0.23			0.0			108[e]	26	63	0	20		
4/6 1335	25,500	59	10.1	99	124	7.3/8.0	1.03[c]		3.8/0.17		0/0.00	62/1.02		4.8/0.14			0.0			82[e]	14	51	0	9		
5/5 0730	11,600	62	8.5	86	182	7.4/7.7	14/0.70	6.7/0.55	13/0.57	1.4/0.04	0/0.00	74/1.21	13/0.27	11/0.31	0.7/0.01	0.0/0.00	0.1	19	Fe 0.02 Cu 0.02 Al 0.03 PO_4 0.35 ABS 0.0 [d]	115[f]	31	62	1	7		
6/1 0550	12,600	66	8.0	85	211	7.5/8.0	1.40[c]		16/0.70		0/0.00	91/1.49		12/0.34			0.1			139[e]	33	70	0	14		
7/5 0630	9,560	67	8.7	94	172	7.4/7.6	1.18[c]		13/0.57		0/0.00	74/1.21		9.0/0.25			0.0			114[e]	33	59	0	7		
8/8 0910	11,600	73	7.6	87	172	7.3/7.6	1.16[c]		12/0.52		0/0.00	77/1.26		10/0.28			0.1			114[e]	31	58	0	25		
9/12 0800	10,100	70	7.1	79	259	/7.9	18/0.90	10/0.84	21/0.91	1.6/0.04	0/0.00	121/1.98	12/0.25	15/0.42	0.2/0.00	0.1/0.01	0.1	23	Cu 0.01 Zn 0.01 PO_4 0.45 ABS 0.0 [d]	161[f]	34	87	0	40		
10/5 0930	6,740	68	7.7	84	191	7.2/7.4	1.30[c]		10/0.44		0/0.00	79/1.29		7.5/0.21			0.1			126[e]	25	65	0	30		
11/7 0900	7,100	57	8.9	86	190	7.7/7.7	1.30[c]		14/0.61		0/0.00	89/1.46		8.0/0.23			0.1			125[e]	32	65	0	4		
12/7 1005	23,900	51	9.1	82	152	7.2/7.2	1.06[c]		9.9/0.43		0/0.00	56/0.92		6.5/0.18			0.1			100[e]	29	53	7	30		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO.5)

SACRAMENTO RIVER AT FREEPORT (STA. 15b) (continued)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/1-9	12,600				169	7.7	12 / 0.60	7.2 / 0.59	14 / 0.61	0.5 / 0.01	0 / 0.00	82 / 1.34	9.6 / 0.20	7.0 / 0.20	0.5 / 0.01	0.1 / 0.01	0.0	22	Fe 0.02	113[f] / 117[g]	34	59	0			
1/10-18	13,300				177	7.8	13 / 0.65	6.9 / 0.57	14 / 0.61	1.5 / 0.04	0 / 0.00	83 / 1.36	10 / 0.21	7.3 / 0.21	0.7 / 0.01	0.1 / 0.01	0.1	22	Fe 0.00	117[f] / 119[g]	32	61	0			
1/19-28	11,700				182	7.8	14 / 0.70	7.3 / 0.60	15 / 0.65	1.1 / 0.03	0 / 0.00	89 / 1.46	10 / 0.21	8.9 / 0.25	0.3 / 0.00	0.1 / 0.01	0.0	23	Fe 0.00	124[f] / 126[g]	33	65	0			
1/29-31 2/1	20,700				207	7.4	15 / 0.75	7.4 / 0.61	15 / 0.65	1.4 / 0.04	0 / 0.00	80 / 1.31	16 / 0.33	12 / 0.34	1.3 / 0.02	0.1 / 0.01	0.1	22	Fe 0.10	129[f] / 137[g]	32	68	2			
2/2-10	40,000				151	7.7	12 / 0.60	5.8 / 0.48	9.1 / 0.40	1.2 / 0.03	0 / 0.00	62 / 1.02	12 / 0.25	6.5 / 0.18	1.3 / 0.02	0.2 / 0.01	0.1	18	Fe 0.18	97[f] / 100[g]	26	54	3			
2/11-19	46,100				126	7.4	11 / 0.55	5.0 / 0.41	6.2 / 0.27	1.0 / 0.03	0 / 0.00	58 / 0.95	8.4 / 0.17	3.0 / 0.08	1.0 / 0.02	0.1 / 0.01	0.1	20	Fe 0.14	85[f] / 87[g]	21	48	0			
2/20-28	30,900				146	7.9	13 / 0.65	5.5 / 0.45	8.0 / 0.35	1.3 / 0.03	0 / 0.00	71 / 1.16	8.0 / 0.17	4.2 / 0.12	0.7 / 0.01	0.1 / 0.01	0.2	24	Fe 0.07	100[f] / 106[g]	24	55	0			
3/1-10	22,500				156	7.7	13 / 0.65	6.7 / 0.55	9.3 / 0.40	1.3 / 0.03	0 / 0.00	79 / 1.29	7.0 / 0.15	5.5 / 0.16	1.0 / 0.02	0.1 / 0.01	0.1	26	Fe 0.05	109[f] / 84[g]	25	60	0			
3/11-20	28,200				138	7.7	12 / 0.60	5.8 / 0.48	8.3 / 0.36	1.3 / 0.03	0 / 0.00	69 / 1.13	7.0 / 0.15	4.5 / 0.13	1.3 / 0.02	0.1 / 0.01	0.1	24	Fe 0.08	98[f] / 79[g]	24	54	0			
3/21-31	34,100				127	7.6	11 / 0.55	5.7 / 0.47	6.5 / 0.28	0.9 / 0.02	0 / 0.00	65 / 1.07	6.0 / 0.12	3.5 / 0.10	1.0 / 0.02	0.1 / 0.01	0.1	23	Fe 0.10	90[f] / 107[g]	21	51	0			
4/1-10	24,300				140	7.7	12 / 0.60	5.8 / 0.48	8.2 / 0.36	0.9 / 0.02	0 / 0.00	66 / 1.08	9.0 / 0.19	5.5 / 0.16	0.7 / 0.01	0.1 / 0.01	0.1	22	Fe 0.02	97[f] / 91[g]	25	54	0			
4/11-20	15,500				143	7.9	12 / 0.60	6.0 / 0.49	7.7 / 0.33	0.9 / 0.02	0 / 0.00	67 / 1.10	8.0 / 0.17	5.8 / 0.16	0.9 / 0.01	0.0 / 0.00	0.1	21	Fe 0.02	95[f] / 104[g]	23	55	0			
4/21-30	11,500				160	7.8	13 / 0.65	6.2 / 0.51	11 / 0.48	0.9 / 0.02	0 / 0.00	70 / 1.15	9.0 / 0.19	8.8 / 0.25	1.1 / 0.02	0.0 / 0.00	0.1	22	Fe0.01	106[f] / 116[g]	29	58	1			
5/1-10	11,300				182	7.9	14 / 0.70	7.5 / 0.62	12 / 0.52	1.0 / 0.03	0 / 0.00	76 / 1.25	14 / 0.29	10 / 0.28	1.2 / 0.02	0.0 / 0.00	0.0	25	Fe 0.00	122[f] / 126[g]	28	66	4			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO.5)

SACRAMENTO RIVER AT FREEPORT (STA. 15b) (continued)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
5/11-20	14,200				193	7.9	14 / 0.70	7.8 / 0.64	14 / 0.61	1.1 / 0.03	0 / 0.00	82 / 1.34	13 / 0.27	12 / 0.34	1.0 / 0.02	0.0 / 0.00	0.0	24	Fe 0.00	127[f] / 127[g]	31	67	0			
5/21-31	13,800				205	8.0	15 / 0.75	7.9 / 0.65	15 / 0.65	1.1 / 0.03	0 / 0.00	87 / 1.43	13 / 0.27	12 / 0.34	1.4 / 0.02	0.0 / 0.00	0.1	22	Fe 0.00	130[f] / 132[g]	31	70	0			
6/1-10	13,800				207	7.6	14 / 0.70	8.3 / 0.68	15 / 0.65	1.2 / 0.03	0 / 0.00	90 / 1.48	12 / 0.25	12 / 0.34	1.1 / 0.02	0.0 / 0.00	0.1	24	Fe 0.00	132[f] / 139[g]	32	69	0			
6/11-20	9,360				204	8.0	15 / 0.75	7.7 / 0.63	14 / 0.61	1.3 / 0.03	0 / 0.00	88 / 1.44	11 / 0.23	12 / 0.34	1.2 / 0.02	0.0 / 0.00	0.1	24	Fe 0.00	129[f] / 134[g]	30	69	0			
6/21-30	9,700				184	7.9	13 / 0.65	7.2 / 0.59	13 / 0.57	1.3 / 0.03	0 / 0.00	77 / 1.26	11 / 0.23	11 / 0.31	1.2 / 0.02	0.0 / 0.00	0.1	23	Fe 0.00	119[f] / 124[g]	31	62	0			
7/1-10	9,800				175	8.1	13 / 0.65	6.0 / 0.49	12 / 0.52	1.2 / 0.03	0 / 0.00	82 / 1.34	7.0 / 0.15	4.8 / 0.14	1.3 / 0.02	0.1 / 0.01	0.1	23	Fe 0.00	108[f] / 116[g]	31	57	0			
7/11-20	10,500				168	8.1	11 / 0.55	7.7 / 0.63	12 / 0.52	1.2 / 0.03	0 / 0.00	76 / 1.25	9.0 / 0.19	9.0 / 0.25	1.3 / 0.02	0.0 / 0.00	0.1	23	Fe 0.00	111[f] / 111[g]	30	59	0			
7/21-31	11,300				166	7.8	11 / 0.55	6.9 / 0.57	12 / 0.52	1.1 / 0.03	0 / 0.00	76 / 1.25	9.0 / 0.19	7.5 / 0.21	1.2 / 0.02	0.1 / 0.01	0.1	24	Fe 0.00	110[f] / 116[g]	31	56	0			
8/1-10	11,400				180	7.8	13 / 0.65	7.2 / 0.59	13 / 0.57	1.4 / 0.04	0 / 0.00	84 / 1.38	9.0 / 0.19	9.0 / 0.25	1.1 / 0.02	0.1 / 0.01	0.0	23	Fe 0.00	118[f] / 125[g]	31	62	0			
8/11-20	11,700				188	7.7	13 / 0.65	7.7 / 0.63	14 / 0.61	1.2 / 0.03	0 / 0.00	86 / 1.41	7.0 / 0.15	9.5 / 0.27	1.0 / 0.02	0.1 / 0.01	0.0	24	Fe 0.00	120[f] / 136[g]	32	64	0			
8/21-31	11,200				204	7.7	14 / 0.70	8.0 / 0.66	16 / 0.70	1.4 / 0.04	0 / 0.00	96 / 1.57	10 / 0.21	10 / 0.28	1.1 / 0.02	0.1 / 0.01	0.1	22	Fe 0.00	130[f] / 139[g]	33	68	0			
9/1-10	9,580				245	7.8	16 / 0.80	10 / 0.85	20 / 0.87	1.2 / 0.03	0 / 0.00	112 / 1.84	11 / 0.23	13 / 0.37	0.9 / 0.01	0.3 / 0.02	0.1	25	Fe 0.00	152[f] / 156[g]	34	83	0			
9/11-20	10,100				252	7.9	17 / 0.85	12 / 0.97	21 / 0.91	1.2 / 0.03	0 / 0.00	118 / 1.93	15 / 0.31	14 / 0.39	1.0 / 0.02	0.3 / 0.02	0.0	25	Fe 0.00	164[f] / 169[g]	33	91	0			
9/21-30	9,330				214	7.8	16 / 0.80	8.0 / 0.66	17 / 0.74	1.3 / 0.03	0 / 0.00	100 / 1.64	9.8 / 0.20	11 / 0.31	0.9 / 0.01	0.2 / 0.01	0.0	25	Fe 0.00	138[f] / 138[g]	33	73	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 / 0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT FREEPORT (STA. 15b) (continued)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
10/1-10	7,090				197	7.5	14 / 0.70	8.3 / 0.68	13 / 0.57	1.4 / 0.04	0 / 0.00	91 / 1.49	8.0 / 0.17	8.8 / 0.25	0.5 / 0.01	0.1 / 0.01	0.0	25	Fe 0.05	124[f] / 105[g]	29	69	0			
10/11-20	6,950				184	8.0	14 / 0.70	8.0 / 0.66	11. / 0.48	1.5 / 0.04	0 / 0.00	85 / 1.39	8.0 / 0.17	8.0 / 0.23	0.9 / 0.01	0.1 / 0.01	0.0	25	Fe 0.05	119[f] / 101[g]	26	68	0			
10/21-31	7,200				184	7.5	14 / 0.70	7.8 / 0.64	12 / 0.52	1.4 / 0.04	0 / 0.00	87 / 1.43	8.0 / 0.17	8.5 / 0.24	0.9 / 0.01	0.1 / 0.01	0.0	25	Fe 0.05	121[f] / 108[g]	27	67	0			
11/1-10	7,300				182	7.7	14 / 0.70	7.8 / 0.64	12 / 0.52	1.6 / 0.04	0 / 0.00	87 / 1.43	8.0 / 0.17	8.0 / 0.23	1.3 / 0.02	0.0 / 0.00	0.0	25	Fe 0.00	121[f] / 110[g]	27	67	0			
11/11-20	7,340				188	7.7	15 / 0.75	7.7 / 0.63	13 / 0.57	1.4 / 0.04	0 / 0.00	89 / 1.46	9.0 / 0.19	8.9 / 0.25	1.3 / 0.02	0.0 / 0.00	0.0	26	Fe 0.00	126[f] / 117[g]	29	69	0			
11/21-30	10,100				191	7.6	14 / 0.70	8.0 / 0.66	13 / 0.57	1.6 / 0.04	0 / 0.00	86 / 1.41	10 / 0.21	9.4 / 0.27	1.0 / 0.02	0.0 / 0.00	0.0	26	Fe 0.00	125[f] / 124[g]	29	68	0			
12/1-7	25,000				145	7.2	12 / 0.60	5.1 / 0.42	9.3 / 0.40	1.6 / 0.04	0 / 0.00	56 / 0.92	15 / 0.31	7.0 / 0.20	2.3 / 0.04	0.3 / 0.02	0.1	18	Fe 0.13	99[f] / 115[g]	27	51	5			
12/8-20	12,100				205	7.9	15 / 0.75	8.9 / 0.73	14 / 0.61	1.6 / 0.04	0 / 0.00	89 / 1.46	14 / 0.29	10 / 0.28	1.6 / 0.03	0.2 / 0.01	0.1	23	Fe 0.07	132[f] / 141[g]	29	74	1			
12/21-31	14,000				171	7.4	13 / 0.65	7.2 / 0.59	11 / 0.48	1.4 / 0.04	0 / 0.00	72 / 1.18	13 / 0.27	8.5 / 0.24	1.6 / 0.03	0.2 / 0.01	0.0	22	Fe 0.09	113[f] / 122[g]	27	62	3			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER NEAR HAMILTON CITY (STA. 13)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/2 1315	5,780	47	11.5	97	149	7.3/7.7	1.22[c]		8.3/0.36		0.0/0.00	80/1.31		5.0/0.14			0.0			108[e]	23	61	0	4	Median 62.	USGS
2/15 0710	25,800	50	11.0	97	127	7.3/8.0	1.06[c]		6.0/0.26		0.0/0.00	66/1.08		2.2/0.06			0.1			92[e]	20	53	0	15	Maximum 7,000.	
3/2 1255	14,920	52	10.1	92	137	7.3/7.9	1.06[c]		8.0/0.35		0.0/0.00	74/1.21		2.2/0.06			0.0			99[e]	25	53	0	10	Minimum 0.13	
4/10 1300	7,957	58	9.8	95	135	7.5/8.0	1.06[c]		6.6/0.29		0.0/0.00	71/1.16		3.5/0.10			0.0			97[e]	21	53	0	0.4		
5/1 1245	7,197	56	10.1	96	131	7.3/7.7	11/0.55	5.7/0.47	7.2/0.31	0.8/0.02	0.0/0.00	64/1.05	8.8/0.18	2.6/0.07	0.0/0.00	0.2/0.01	0.0	22	Fe 0.08 Al 0.06 Zn 0.01 PO_4 0.00 ABS 0.1 d	90[f]	23	51	0	5		
6/8 0930	7,114	62	8.8	90	128	7.4/7.9	1.08[c]		7.4/0.32		0.0/0.00	64/1.05		3.1/0.09			0.0			92[e]	23	54	2	8		
7/5 1330	8,480	65	9.3	98	123	7.2/8.0	0.93[c]		6.8/0.30		0.0/0.00	70/1.15		1.9/0.05			0.0			89[e]	24	47	0	5		
8/9 1140	8,571	61	9.8	99	119	7.3/7.7	0.93[c]		6.4/0.28		0.0/0.00	64/1.05		2.5/0.07			0.0			86[e]	23	46	0	1		
9/7 1010	6,131	62	8.9	91	123	7.3/7.9	11/0.55	5.2/0.43	6.3/0.27	1.1/0.03	0.0/0.00	65/1.07	5.0/0.10	3.0/0.08	0.5/0.01	0.1/0.01	0.0	26	Fe 0.12 Zn 0.01 d PO_4 0.05 ABS 0.0 Cu 0.01	90[f]	21	49	0	4		
10/9 1630	4,858	60	9.9	99	126	7.5/7.8	1.00[c]		5.8/0.25		0.0/0.00	68/1.11		2.0/0.06			0.2			91[e]	20	50	0	6		
11/16 1455	4,812	52	10.4	95	143	7.3/7.9	1.08[c]		7.7/0.33		0.0/0.00	78/1.28		3.5/0.10			0.1			103[e]	23	54	0	5		
12/7 1515	5,801	51	10.1	90	157	7.2/7.8	1.18[c]		8.4/0.37		0.0/0.00	67/1.10		6.5/0.18			0.0			113[e]	24	59	4	15		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO RIVER AT KESWICK (STA. 12)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/10 1645	4,430	48	8.9	77	129	7.0 / 7.5	1.08[c]		7.7 / 0.33		0.0 / 0.00	89 / 1.46		2.2 / 0.06			0.0			93[e]	23	54	0	5	Median 1.96	USGS
2/13 1320	14,200	49	10.2	89		7.1	S A M P L E			M I S P L A C E D		A T		L A B											Maximum 23.	
3/6 1520	12,600	48	10.1	87	126	7.2 / 7.7	0.97[c]		7.6 / 0.33		0.0 / 0.00	67 / 1.10		1.8 / 0.05			0.0			91[e]	25	49	0	1	Minimum 0.045-	
4/10 1515	6,200	53	10.0	92	116	7.3 / 7.9	0.88[c]		7.5 / 0.33		0.0 / 0.00	58 / 0.95		2.5 / 0.07			0.0			84[e]	27	44	0	4		
5/8 1420	7,700	52	10.6	96	112	7.1 / 7.3	11 / 0.55	4.5 / 0.37	6.4 / 0.28	0.3 / 0.01	0.0 / 0.00	57 / 0.93	8.0 / 0.17	2.8 / 0.08	0.0 / 0.00	0.1 / 0.01	0.0	23	Fe 0.21 Cu 0.01 d Al 0.02 Zn 0.09 PO_4 0.05 ABS 0.0	84[f]	23	46	0	4		
6/12 1220	8,280	51	9.7	87	119	7.3 / 7.7	1.01[c]		6.5 / 0.28		0.0 / 0.00	61 / 1.00		2.2 / 0.06			0.0			86[e]	22	50	0	6		
7/10 1630	11,200	53	9.8	90	117	7.2 / 8.0	0.91[c]		6.6 / 0.29		0.0 / 0.00	63 / 1.03		2.2 / 0.06			0.0			84[e]	24	46	0	4		
8/8 0720	11,800	49	10.4	90	112	7.3 / 7.9	0.94[c]		6.0 / 0.26		0.0 / 0.00	62 / 1.02		2.4 / 0.07			0.1			81[e]	22	47	0	2		
9/7 0935	8,390	55	9.0	85	114	7.3 / 7.9	12 / 0.60	3.6 / 0.30	6.0 / 0.26	1.2 / 0.03	0.0 / 0.00	62 / 1.02	5.0 / 0.10	2.5 / 0.07	0.2 / 0.00	0.1 / 0.01	0.0	23	Fe 0.10 Cu 0.01 d Al 0.05 Zn 0.07 PO_4 0.05 ABS 0.0	85[f]	22	45	0	3		
10/5 1450	5,880	58	9.0	87	114	7.3 / 7.5	0.92[c]		4.9 / 0.21		0.0 / 0.00	60 / 0.98		1.0 / 0.03			0.1			82[e]	19	46	0	4		
11/9 0840	5,610	57	9.3	89	127	7.2 / 8.0	1.00[c]		6.3 / 0.27		0.0 / 0.00	72 / 1.18		2.0 / 0.06			0.0			92[e]	21	50	0	5		
12/7 1545	3,380	52	9.3	85	138	7.0 / 7.3	1.04[c]		7.2 / 0.31		0.0 / 0.00	67 / 1.10		3.5 / 0.10			0.0			100[e]	23	52	0	8		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER NEAR MALLARD SLOUGH (STA. 15c)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in ppm	Mineral constituents in equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total[g] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1/20 1145		55			1605					219					412						944	59					USBR
2/20 1340		53			250					21					33						174	37					USBR
3/15 1300		57			593					72					133						480	53					USBR
4/21 1035		60			876					--					--						554	--					USBR
5/10 1300		64			2778					476					870						1946	74					USBR
6/14 1300		90			2184					292					593						1340	58					USBR
7/20 1340		92			12308					2026					4118						8514	72					USBR
8/16 1015		82			12022					1937					4047						8168	70					USBR
9/19 1025		75			5916					874					1789						3666	64					USBR
10/19 1345		--			11830					2208					3905						8064	81					USBR
11/9 1040		--			5564					803					1669						3376	63					USBR
12/13 1210		--			1208					161					304						706	58					USBR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT RIO VISTA (STA. 16)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 62.	USGS
1/9 1000		44	10.9	89	184	7.3/7.8	1.34[c]		11/0.48		0/0.00	81/1.33		8.5/0.24			0.0			115[e]	26	67	1	15		
2/13 1055		52	8.9	81	169	7.3/7.5	1.22[c]		11/0.48		0/0.00	69/1.13		7.7/0.22			0.1			106[e]	28	61	4	85	Maximum 7000.	
3/6 1105		51	10.0	89	195	7.3/8.1	1.42[c]		10/0.44		0/0.00	88/1.44		9.2/0.26			0.1			122[e]	24	71	0	20	Minimum 2.3	
4/10 1100		60	8.8	88	163	7.4/7.9	1.24[c]		10/0.44		0/0.00	72/1.18		7.5/0.21			0.0			102[e]	26	62	3	25		
5/1 1040		62	9.3	94	169	7.3/7.8	13/0.65	6.7/0.55	11/0.48	1.8/0.05	0/0.00	69/1.13	14/0.29	8.8/0.25	0.7/0.01	0.0/0.00	0.1	18	Fe 0.01 Cu 0.03 PO_4 0.20 ABS 0.0 [d]	108[f]	28	60	3	20		
6/5 0920		68	8.7	95	216	7.7/8.1	1.44[c]		17/0.74		0/0.00	94/1.54		12/0.34			0.0			135[e]	34	72	0	31		
7/10 0925		74	8.6	100	183	7.8/7.8	1.26[c]		14/0.61		0/0.00	78/1.28		10/0.28			0.0			115[e]	33	63	0	50		
8/8 1220		74	7.0	81	178	7.4/7.9	1.20[c]		12/0.52		0/0.00	78/1.28		10/0.28			0.2			111[e]	30	60	0	28		
9/12 1020		72	7.2	84	235	7.5/8.1	16/0.80	9.5/0.78	18/0.78	1.4/0.04	0/0.00	109/1.79	12/0.25	13/0.37	0.8/0.01	0.1/0.01	0.1	21	Total Fe 0.20 PO_4 0.30 ABS 0.0 [d]	146[f]	32	79	9	35		
10/5 1200		69	7.5	83	219	7.6/7.7	1.54[c]		14/0.61		0/0.00	103/1.69		10/0.28			0.1			137[e]	32	77	0	30		
11/7 1045		58	8.5	83	202	7.4/8.0	1.38[c]		13/0.57		0/0.00	90/1.48		8.2/0.23			0.2			126[e]	29	69	0	8		
12/7 1330		51	8.5	76	163	7.0/7.7	1.10[c]		11/0.48		0/0.00	60/0.98		9.7/0.27			0.1			102[e]	30	55	6	25		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT SNODGRASS SLOUGH (STA. 97)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total[g] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1/16 1240		46			182	7.2	12	6.8	11	1.2	0.0	71	8.2	8.5	0.0					190	29					USBR
2/20 1250		--			141	7.6	9.4	7.8	8.1	0.8	0.0	62	9.1	7.1	0.0					136	24					USBR
3/13 1330		54			130	8.0	11	6.6	6.4	1.6	0.0	71	7.2	5.7	0.6					108	20					USBR
4/11 1310		64			138	7.8	12	6.0	8.0	1.0	0.0	59	8.0	6.0	1.0					112	23					USBR
5/15 1235		63			168	7.1	13	7.4	13	1.2	0.0	70	12	10	0.0					128	30					USBR
6/12 1405		71			193	8.2	15	8.7	15	1.6	0.0	81	12	11	0.0					134	30					USBR
7/18 1325		74			154	8.0	12	6.8	11	1.2	0.0	65	9.1	13	0.6					114	28					USBR
8/17 1405		72			227	7.7	25	7.9	13	0.0	0.0	104	13	11	0.0					148	23					USBR
9/18 1240		68			246	7.5	16	12	17	0.0	0.0	107	12	13	0.0					160	30					USBR
10/25 1155		64			183	7.6	15	9.0	11	2.3	0.0	90	8.2	11	0.0					124	23					USBR
11/13 1300		57			191	7.5	14	9.2	11	0.0	0.0	102	8.2	11	0.0					120	25					USBR
12/11 1135		47			206	7.2	14	9.2	14	1.6	0.0	77	20	11	0.6					138	29					USBR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SACRAMENTO RIVER AT TOLAND LANDING (STA. 15a)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids[g] in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1/16 1340		46			202				13					11						198	28					USBR
2/20 1420		52			160															116						USBR
3/14 1125		55			201															126						USBR
4/10 1145		62			149															140						USBR
5/15 1040		63			196															154						USBR
6/12 1240		68			231															146						USBR
7/18 1155		74			2759															1764						USBR
8/17 1115		70			1757															1042						USBR
9/18 1135		68			746															406						USBR
10/16 1115		--			1438															838						USBR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (5)

SACRAMENTO SLOUGH NEAR KNIGHTS LANDING (STA. 14a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/4 1325	265	43	10.0	81	518	7.3 / 8.2	3.90[c]		37 / 1.61		0.0 / 0.00	230 / 3.77		48 / 1.35			0.0			311[e]	29	195	6	20	Median 23. Maximum 2,400. Minimum 2.3	USGS
2/	NOT SAMPLED																									
3/13 1115	1,150	57	9.2	88	318	7.7 / 7.9	2.92[c]		19 / 0.83		0.0 / 0.00	172 / 2.82		13 / 0.37			0.1			191[e]	25	126	0	70		
4/	NOT SAMPLED																									
5/4 1240	994	67	8.0	6	302	7.9 / 8.0	27 / 1.35	18 / 1.49	22 / 0.96	2.6 / 0.07	0.0 / 0.00	178 / 2.92	10 / 0.21	25 / 0.70	0.4 / 0.01	0.0 / 0.00	0.1	24	Fe 0.04 Al 0.09 d Cu 0.02 PO_4 0.30 ABS 0.0	217[f]	25	142	0	25		
6/13 1000	549	75	7.0	90	427	8.2 / 7.5	3.06[c]		32 / 1.39		0.0 / 0.00	198 / 3.25		36 / 1.02			0.0			256[e]	31	153	0	35		
7/6 1100	670	73	8.3	95	627	8.0 / 7.9	3.88[c]		54 / 2.35		0.0 / 0.00	227 / 3.72		77 / 2.17			0.1			376[e]	38	194	8	16		
8/15 1040	826	78	6.5	78	444	7.6 / 8.4	3.52[c]		32 / 1.39		5 / 0.17	238 / 3.90		25 / 0.70			0.1		Tot. Alk. 248	266[e]	28	176	0	63		
9/11 1205	1,130	74	7.4	86	387	7.4 / 8.1	31 / 1.55	19 / 1.59	25 / 1.09	2.0 / 0.05	0.0 / 0.00	227 / 3.72	5.0 / 0.10	14 / 0.39	0.5 / 0.01	0.1 / 0.01	0.0	30	Fe 0.24 Mn 0.11 As 0.01 PO_4 0.35 ABS 0.0 d	239[f]	25	157	0	50		
10/4 0845	337	69	8.0	88	434	7.6 / 8.1	3.38[c]		28 / 1.22		0.0 / 0.00	232 / 3.80		24 / 0.68			0.1			260[e]	27	169	0	35		
11/14 1425	250	52	9.9	90	392	7.6 / 8.2	2.90[c]		26 / 1.13		0.0 / 0.00	196 / 3.21		23 / 0.65			0.1			235[e]	26	145	0	20		
12/8 1235	3,310	49	7.8	68	174	7.0 / 7.4	1.30[c]		10 / 0.44		0.0 / 0.00	81 / 1.33		7.2 / 0.20			0.0			104[e]	25	65	0	280		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SALT SLOUGH AT SAN LUIS RANCH (STA. 92a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/12 1010	78	48	4.7	40	2130	7.4	— 8.70[c]		285 12.40		0.0 0.00	251 4.11	344 7.16	358 10.10			1.7			1280	59	435	229	70		
2/16 1130	66	54	4.2	39	2550	7.6	— 10.00[c]		356 15.49		0.0 0.00	258 4.23	446 9.29	440 12.41			2.2			1530	61	500	288	30		
3/9 1030	160	54	3.9	36	2440	7.8	— 9.56[c]		334 14.53		0.0 0.00	228 3.74	445 9.26	385 10.86			2.0			1490	60	478	291	30		
4/13 1200	47	60	5.0	50	1750	7.5	— 7.40[c]		224 9.74		0.0 0.00	207 3.39	222 4.62	316 8.91			0.8			1050	57	370	200	10		
5/4 0945	59	61	6.5	65	1210	7.8	56 2.79	29 2.41	146 6.35	4.8 0.12	0.0 0.00	160 2.62	135 2.81	220 6.20	2.8 0.05	0.5 0.03	0.4	25	Al 0.04, ABS 0.00 PO_4 0.40	698	54	260	129	70		
6/8 0615	93	67	2.6	28	1020	8.0	— 4.76[c]		115 5.00		0.0 0.00	172 2.82	132 2.75	148 4.17			0.7			620	51	238	97	15		
7/13 0830	64	76	3.2	38	1140	7.7	— 4.96[c]		147 6.39		0.0 0.00	168 2.75	160 3.33	172 4.85			1.0			680	56	248	110	100		
8/3 1612	48	83	3.9	49	1240	7.9	— 5.00[c]		154 6.70		0.0 0.00	176 2.88	124 2.58	222 6.26			0.6			745	57	250	106	57		
9/7 0930	68	70	3.4	37	1300	7.4	52 2.59	32 2.61	157 6.83	5.0 0.13	0.0 0.00	174 2.85	129 2.69	232 6.54	2.4 0.04	0.3 0.02	0.7	25	Cu 0.01, Al 0.08, Zn 0.05, PO_4 0.90, ABS 0.0	721	56	260	117	35		
10																										
11/8 1310	16	60	8.0	80	2920	8.1	— 10.44[c]		425 18.49		0.0 0.00	262 4.29	370 7.70	617 17.41			1.1			1755	64	522	301	25		
12/5 0945		51	5.4	49	2040	7.5	— 8.00[c]		276 12.01		0.0 0.00	224 3.67	266 5.54	372 10.49			1.1			1226	60	400	216	30		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT ANTIOCH (STA. 28)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961	Tidal																								Median 62. Maximum 2,400. Minimum 6.2	USGS
1/9 1235		47	9.7	82	440	7.1 / 7.5	1.88[c]		48 / 2.09		0 / 0.00	76 / 1.25		74 / 2.09			0.1			242[e]	53	94	32	15		
2/13 1420		54	8.1	75	291	6.9 / 7.5	1.68[c]		28 / 1.22		0 / 0.00	76 / 1.25		31 / 0.87			0.1			160[e]	42	84	22	30		
3/6 1255		54	9.5	88	307	7.3 / 7.8	1.98[c]		25 / 1.09		0 / 0.00	79 / 1.29		33 / 0.93			0.1			169[e]	36	99	34	25		
4/10 1330		58	8.9	87	198	7.3 / 8.0	1.40[c]		14 / 0.61		0 / 0.00	75 / 1.23		16 / 0.45			0.0			109[e]	30	70	8	15		
5/1 1251		64	9.0	94	359	7.7 / 7.4	17 / 0.85	8.6 / 0.71	40 / 1.74	2.0 / 0.05	0 / 0.00	78 / 1.28	22 / 0.46	60 / 1.69	0.2 / 0.00	0.1 / 0.01	0.1	16	Fe 0.04 Al 0.30 Cu 0.01 Zn 0.02 PO_4 0.10 ABS 0.0	204[f]	52	78	14	70		
6/5 1115		67	8.2	88	1,150	7.5 / 7.7	3.08[c]		174 / 7.57		0 / 0.00	82 / 1.34		278 / 7.84			0.2			632[e]	71	154	87	49		
7/10 1125		78	8.7	105	3,400	7.8 / 7.9	8.33[c]		580 / 23.06		0 / 0.00	92 / 1.51		977 / 27.55			0.4			1,870[e]	73	416	341	20		
8/3 0750		72	7.3	83	6,280	7.8 / 7.6	13.88[c]		1030 / 44.80		0 / 0.00	90 / 1.48		1860 / 52.45			0.6			3,460[e]	76	694	620	2		
9/11 0845		71	7.1	80	4,330	7.6 / 7.6	43 / 2.15	88 / 7.23	715 / 31.10	25 / 0.64	0 / 0.00	94 / 1.54	143 / 2.98	1260 / 35.53	2.5 / 0.04	0.0 / 0.00	0.4	9.9	PO_4 0.30 Zn 0.05 ABS 0.0	2,330[f]	76	469	392	30		
10/6 1335		70	7.1	79	2,530	7.7 / 7.7	5.92[c]		385 / 16.75		0 / 0.00	109 / 1.79		698 / 19.68			0.2			1,392[e]	74	296	207	50		
11/6 0935		60	7.5	75	1,200	7.5 / 7.9	3.36[c]		173 / 7.53		0 / 0.00	102 / 1.67		285 / 8.04			0.2			660[e]	69	168	84	25		
12/13 1300		50	8.3	73	412	7.2 / 7.3	1.70[c]		48 / 2.09		0 / 0.00	78 / 1.28		72 / 2.03			0.1			227[e]	55	85	21	25		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR BIOLA (STA. 24a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/1-10					83.8	6.7	7.2 / 0.36	1.0 / 0.08	7.3 / 0.32		0.0 / 0.00	30 / 0.49								46	42	22	0			
1/11-20					72.7	6.6	8.0 / 0.40	0.5 / 0.04	7.3 / 0.32		0.0 / 0.00	28 / 0.46								51	42	22	0			
1/21-31					72.6	6.5	6.4 / 0.32	1.0 / 0.08	6.6 / 0.29		0.0 / 0.00	28 / 0.46								42	42	20	0			
2/1-10					97	7.5	7.5 / 0.37	2.7 / 0.22	8.8 / 0.38		0.0 / 0.00	48 / 0.79								59	39	29	0			
2/12-20					99	7.4	6.7 / 0.33	3.3 / 0.27	8.8 / 0.38		0.0 / 0.00	43 / 0.70								66	39	30	0			
2/21-28					92	7.2	6.5 / 0.32	2.7 / 0.22	8.5 / 0.37		0.0 / 0.00	40 / 0.66								60	41	27	0			
3/1-10					79	7.0	6.4 / 0.32	1.5 / 0.12	8.0 / 0.35		0.0 / 0.00	32 / 0.52								64	44	22	0			
3/11-20					76	7.2	4.8 / 0.24	2.2 / 0.18	8.2 / 0.36		0.0 / 0.00	30 / 0.49								58	46	21	0			
3/21-31					75	7.2	6.0 / 0.30	1.9 / 0.16	7.8 / 0.34		0.0 / 0.00	30 / 0.49								56	42	23	0			
4/1-10					76	6.7	6.0 / 0.30	1.2 / 0.10	7.6 / 0.33		0.0 / 0.00	29 / 0.48								56	45	20	0			
4/11-20					73	7.2	5.6 / 0.28	1.7 / 0.14	7.1 / 0.31		0.0 / 0.00	26 / 0.43								58	42	21	0			
4/21-30					69	7.1	4.8 / 0.24	2.2 / 0.18	7.1 / 0.31		0.0 / 0.00	27 / 0.44								56	42	21	0			
5/1-10					71	6.5	5.6 / 0.28	1.5 / 0.12	7.1 / 0.31		0.0 / 0.00	22 / 0.36								52	44	20	2			
5/11-19					69	6.6	5.6 / 0.28	1.9 / 0.16	6.7 / 0.29		0.0 / 0.00	24 / 0.39								50	40	22	2			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR BIOLA (STA. 24a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
5/21-31					70	6.6	4.8 / 0.24	1.9 / 0.16	6.7 / 0.29		0.0 / 0.00	24 / 0.39								50	42	20	0			
6/1-30					73	7.2	5.2 / 0.26	1.7 / 0.14	7.1 / 0.31		0.0 / 0.00	26 / 0.43								55	44	20	0			
7/1-31					74	6.7	5.2 / 0.26	1.7 / 0.14	7.1 / 0.31		0.0 / 0.00	25 / 0.41								58	44	20	0			
8/1-31					74	7.0	4.8 / 0.24	2.4 / 0.20	6.6 / 0.29		0.0 / 0.00	27 / 0.44								56	40	22	0			
9/2-15					74	7.1	5.6 / 0.28	1.9 / 0.16	7.0 / 0.30		0.0 / 0.00	28 / 0.46								53	41	22	0			
9/17-30					78	7.4	5.6 / 0.28	2.4 / 0.20	6.9 / 0.30		0.0 / 0.00	31 / 0.51								56	38	24	0			
10/1-31					85	7.0	6.4 / 0.32	2.4 / 0.20	7.7 / 0.33		0.0 / 0.00	34 / 0.56								56	39	26	0			
11/1-29					84		7.2 / 0.36	2.2 / 0.18	7.5 / 0.33		0.0 / 0.00	34 / 0.56								62	38	27	0			
12/2-23					89	7.5	8.0 / 0.40	2.4 / 0.20	6.1 / 0.27		0.0 / 0.00	38 / 0.62								64	31	30	0			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT BRANDT BRIDGE (STA. 101a)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total[g] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
2/21 1105		56			1038				122					198						652	51					USBR
5/11 1050		64			846				87					151						490	45					USBR
8/17 1100		76			519				59					104						332	49					USBR
11/13 1150		56			946				98					176						572	45					USBR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT CROWS LANDING BRIDGE (STA. 26b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USBR
1/13 1100		44			1,360				169					200						878	54					
2/14 1300		59			1,535				209					266						988	59					
3/13 1250		60			1,693				239					313						1,144	61					
4/13 1400		61			1,588				194					295						1,038	53					
5/15 1245		72			976				106					153						580	47					
6/15 1315		84			1,285				141					215						814	48					
7/13 0830		68			1,638				190					302						1,062	50					
8/15 1330		76			1,020				192					302						1,588	53					
9/14 1145		69			1,513				177					268						924	51					
10/12 1235		64			1,640				198					299						1,012	52					
11/14 1220		55			1,736				201					314						1,050	48					
12/18 1230		50			1,517				181					265						968	52					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR DOS PALOS (STA. 25a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							equivalents per million																			
1961																										USBR
1/12 1615		48			577	7.6	29	13	61	2.0	0.0	95	66	83	0.6					368	50					
2/14 1515		--			721	7.7	34	19	72	3.5	0.0	112	97	102	1.2					472	48					
3/14 0900		59			903	7.9	47	26	87	2.0	0.0	102	138	141	4.3					578	46					
4/14 0930		62			461	7.3	26	14	41	2.3	0.0	76	47	67	1.2					324	42					
5/16 0905		66			282	7.5	18	10	25	2.0	0.0	77	25	33	0.0					158	38					
6/16 0925		80			296	7.9	19	11	25	1.6	0.0	71	34	32	0.0					202	36					
7/13 1400		82			357	7.5	20	12	32	1.6	0.0	65	30	47	0.6					224	41					
8/15 1625		--			861	7.8	36	19	98	3.1	0.0	88	48	180	0.6					512	55					
9/14 1530		74			716	7.9	34	16	80	2.3	0.0	112	50	133	0.0					448	53					
10/12 1550		64			557	7.2	25	17	61	3.1	0.0	94	40	93	0.6					332	49					
11/15 1000		52			810	7.8	41	23	87	3.5	0.0	141	79	145	0.6					632	48					
12/18 1530		50			970	7.9	48	27	106	4.7	0.0	140	124	156	0.6					590	49					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE (STA. 25c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/12 1150	148	47	9.3	79	1660	8.2	7.20[c]		225 / 9.79		0.0 / 0.00	291 / 4.77		265 / 7.47			1.1			968	58	360	121	45	Median 23.	
2/16 1355	127	56	10.2	97	2250	7.7	9.10[c]		338 / 14.70		0.0 / 0.00	234 / 3.84	364 / 7.58	395 / 11.14			1.6			1312	62	455	263	30	Maximum 1300.	
3/9 1115	99	57	9.3	89	2570	7.6	9.60[c]		368 / 16.01		0.0 / 0.00	231 / 3.79	412 / 8.58	474 / 13.37			1.8			1500	63	480	291	20	Minimum 0.62	
4/13 1230	92	64	12.4	130	2318	8.1	9.50[c]		298 / 12.96		0.0 / 0.00	250 / 4.10	256 / 5.33	444 / 12.52			0.7			1355	58	475	270	7		
5/4 1030	128	64	9.5	99	1390	7.5	66 / 3.29	33 / 2.75	164 / 7.13	4.4 / 0.11	0.0 / 0.00	195 / 3.20	155 / 3.23	260 / 7.33	4.1 / 0.07	0.0 / 0.00	0.6	19	Fe 0.02, Al 0.11 Cu 0.01, Zn 0.01 PO_4 0.35, ABS 0.0	802	54	302	142	50		
6/8 0705	125	70	6.0	66	1340	8.2	5.80[c]		174 / 7.57		0.0 / 0.00	184 / 3.02	164 / 3.41	250 / 7.05			0.6			780	57	290	139	27		
7/13 0910	76	79	6.4	78	1430	8.0	6.27[c]		166 / 7.22		0.0 / 0.00	189 / 3.10	167 / 3.48	261 / 7.36			0.8			835	54	314	159	30		
8/3 1510	63	79	10.6	129	1610	8.2	6.48		198 / 8.61		0.0 / 0.00	196 / 3.21	169 / 3.52	316 / 8.91			0.7			939	57	320	159	23		
9/7 1015	92	71	6.4	73	1440	7.6	60 / 2.99	35 / 2.89	182 / 7.92	2.8 / 0.07	0.0 / 0.00	182 / 2.98	140 / 2.91	284 / 8.01	1.6 / 0.03	0.3 / 0.02	0.5	23	Al 0.09, Zn 0.01, PO_4 0.25 ABS 0.0	819	57	294	145	30		
10/12 1000	31	64	7.5	79	2480	7.5	10.00[c]		326 / 14.18		0.0 / 0.00	208 / 3.41	275 / 5.73	525 / 14.80			0.6			1450	59	500	329	10		
11/8 1340	16	63	11.1	115	3680	8.0	15.10[c]		508 / 22.10		0.0 / 0.00	220 / 3.61	432 / 8.99	868 / 24.49			0.8			2145	59	755	575	11		
12/5 1046		49	10.6	93	2140	7.8	8.08[c]		302 / 13.14		0.0 / 0.00	230 / 3.77	246 / 5.12	432 / 12.19			0.8			1248	62	404	215	20		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT FRIANT (STA. 24)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[b] MPN/ml	Analyzed by[i]
1961																										USGS
1/4 1100	65	48	10.4	89	60.2	7.4	—/0.38[c]		5.0/0.22		0.0/0.00	29/0.48		4.2/0.12			0.0			48	37	19	0	3	Median 23.	
2/7 0830	51	48	9.9	85	55.5	7.4	—/0.40[c]		4.0/0.17		0.0/0.00	18/0.30		3.5/0.10			0.1			45	30	20	5	8	Maximum 7000.	
3/3 0755	104	47	10.6	90	56	7.5	—/0.31[c]		4.6/0.20		0.0/0.00	20/0.33		6.0/0.17			0.0			45	39	15	0	2	Minimum 2.3	
4/4 0900	132	52	12.7	115	57	7.3	—/0.33[c]		3.0/0.13		0.0/0.00	21/0.34		6.4/0.18			0.0			46	28	17	0	2		
5/9 0705	174	50	10.6	93	56	7.2	3.6/0.18	1.7/0.14	5.0/0.22	0.8/0.02	0.0/0.00	22/0.36	1.0/0.02	5.2/0.15	0.3/0.00	0.1/0.01	0.0	14	PO_4 0.20, Zn 0.01, ABS 0.0	43	39	16	0	1		
6/5 1625	153	60	10.9	109	59	7.5	—/0.28[c]		5.3/0.23		0.0/0.00	19/0.31		6.0/0.17			0.1			47	43	14	0	2		
7/11 1330	178	61	12.8	129	60	7.5	—/0.34[c]		5.5/0.24		0.0/0.00	29/0.48		3.7/0.10			0.0			48	41	17	0	3		
8/4 0636	171	50	10.6	94	64	7.2	—/0.38[c]		5.4/0.23		0.0/0.00	24/0.39		6.0/0.17			0.0			52	38	19	0	3		
9/6 0750	146	52	10.8	97	59	7.3	3.6/0.18	1.6/0.13	5.4/0.23	0.7/0.02	0.0/0.00	24/0.39	0.0/0.00	6.0/0.17	0.4/0.01	0.1/0.01	0.1	10	Zn 0.01, PO_4 0.05, ABS 0.0	40	41	16	0	10		
10/9 1100	91	54	12.9	120	58	7.4	—/0.40[c]		4.7/0.20		0.0/0.00	21/0.34		6.1/0.17			0.1			47	33	20	3	10		
11/6 1130	'88	55	12.0	112	58	7.4	—/0.32[c]		4.5/0.20		0.0/0.00	21/0.34		6.5/0.18			0.1			47	38	16	0	6		
12/7 0740		51	8.1	73	61	6.9	—/0.34[c]		5.3/0.23		0.0/0.00	21/0.34		5.8/0.16			0.0			49	40	17	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT GARWOOD BRIDGE (STA. 101)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961	Tidal																								Median 2400.	USGS
1/13 0920		47	10.4	88	719	7.4/7.8	3.14[c]		86/3.74		0/0.00	115/1.88		123/3.47			0.3			406[e]	54	157	63	10	Maximum > 7000.	
2/17 1150		57	10.6	102	1,030	7.3/7.8	4.38[c]		114/4.96		0/0.00	167/2.74		188/5.30			0.4			582[e]	53	219	82	3	Minimum 23.	
3/10 0940		56	12.2	116	1,130	8.1/8.0	4.76[c]		133/5.79		0/0.00	188/3.08		202/5.70			0.5			640[e]	55	238	84	30		
4/14 1100		66	13.3	141	1,060	8.4/7.7	4.46[c]		132/5.74		0/0.00	162/2.66		186/5.25			0.4			600[e]	56	223	90	25		
5/5 0730		65	9.5	100	873	8.3/7.7	41/2.05	2.3/1.93	102/4.44	6.2/0.16	0/0.00	133/2.18	61/1.27	169/4.77	1.4/0.02	0.2/0.01	0.3	1.4	Al 0.01 Fe 0.01[d] PO_4 1.10 ABS 0.2	472[f]	52	199	90	20		
6/9 0640		70	6.8	76	804	8.1/7.8	3.47[c]		90/3.92		0/0.00	132/2.16		144/4.06			0.3			455[e]	53	173	65	20		
7/14 0810		78	6.3	76	573	7.8/7.6	2.52[c]		56/2.44		0/0.00	107/1.75		102/2.88			0.2			324[e]	49	126	38	32		
8/9 1120		82	3.6	45	582	7.4/7.7	2.50[c]		64/2.78		0/0.00	99/1.62		102/2.88			0.1			329[e]	53	125	52	-		
9/6 1230		77	5.6	67	734	7.6/7.6	32/1.60	18/1.48	90/3.92	6.0/0.15	0/0.00	159/2.61	29/0.60	134/3.78	1.2/0.02	0.2/0.01	0.0	0.5	Zn 0.04 Cu 0.01[d] PO_4 1.35 ABS 0.2	389[f]	55	154	24	25		
10/9 1330		66	12.6	134	904	8.4/8.1	3.48[c]		112/4.87		0/0.00	200/3.28		171/4.82			0.3			512[e]	58	174	10	25		
11/2 1115		56	11.2	106	1,260	7.7/8.2	5.58[c]		152/6.61		0/0.00	208/3.41		233/6.57			0.3			713[e]	54	279	108	9		
12/12 1140		50	8.8	78	1,110	7.6/7.5	4.72[c]		132/5.74		0/0.00	180/2.95		206/5.81			0.4			628[e]	55	236	88	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR GRAYSON (STA. 26)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/7 1130	350	45	10.5	87	1500	7.8	6.70[c]		190 / 8.27		0.0 / 0.00	240 / 3.93		235 / 6.63			0.7			890	55	335	138	10	Median 23.	
2/10 1225		60	9.0	90	1490	7.7	5.92[c]		188 / 8.18		0.0 / 0.00	218 / 3.57		232 / 6.54			1.0			885	58	296	117	30	Maximum 230.	
3/9 1230	335	62	10.2	104	1910	8.0	7.84[c]		233 / 10.14		0.0 / 0.00	228 / 3.74		318 / 8.97			1.1			1140	56	392	205	25	Minimum 2.1.	
4/10 1400	255	68	12.1	132	1690	8.0	7.23[c]		220 / 9.57		0.00 / 0.00	236 / 3.87		288 / 8.12			0.8			1005	57	362	168	4		
5/9 1115	350	71	10.0	112	1080	8.3	50 / 2.50	30 / 2.48	128 / 5.57	3.4 / 0.09	3 / 0.10	181 / 2.97	100 / 2.08	180 / 5.08	3.0 / 0.05	0.1 / 0.01	0.4	26	Al 0.11, Total Alk. 187, PO_4 0.65, As 0.01, ABS 0.0	613	52	249	96	120		
6/6 1410	260	77	12.7	151	1100	8.2	5.48[c]		138 / 6.00		0.0 / 0.00	204 / 3.34		175 / 4.94			0.5			655	52	274	107	27		
7/20 0840	75	72	6.9	78	1320	7.5	56 / 2.79	54 / 4.40	133 / 5.78	3.2 / 0.08	0.0 / 0.00	254 / 4.16	167 / 3.48	200 / 5.64	3.6 / 0.06	0.3 / 0.02	0.56	20		763	44	360	152			
8/9 1430	83	77	10.3	124	1570	7.9	8.05[c]		168 / 7.31		0.0 / 0.00	266 / 4.36		256 / 7.22			0.3			930	48	402	184	20		
9/12 1000	165	71	9.0	102	1500	8.4	67 / 3.34	41 / 3.38	177 / 7.70	4.0 / 0.10	0.0 / 0.00	238 / 3.90	180 / 3.75	257 / 7.25	4.2 / 0.07	0.3 / 0.02	0.6	20	Al 0.01, Cu 0.01, ABS 0.0, Zn 0.01 PO_4 0.40	868	53	336	141	20		
10/9 1200	190	60	7.4	74	1710	7.4	7.68[c]		224 / 9.74		0.0 / 0.00	241 / 3.95		295 / 8.32			0.6			1020	56	384	186	10		
11/1 1425	195	60	7.6	76	1720	8.1	7.76[c]		224 / 9.74		0.0 / 0.00	234 / 3.84		298 / 8.41			0.6			1022	56	388	196	8		
12/5 1350	470	53	4.4	41	1288	7.8	5.10[c]		174 / 7.57		0.0 / 0.00	201 / 3.29		205 / 5.78			0.7			765	60	255	90	15		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT HILLS FERRY BRIDGE (STA. 25b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/12 1300	513	48	9.7	83	1610	7.7	6.46[c]		228 / 9.92		0.0 / 0.00	279 / 4.57	231 / 4.81	238 / 6.71			1.2			916	61	323	94	30	Median 62.	
2/16 1545	358	58	8.2	80	2360	8.0	9.90[c]		338 / 14.70		0.0 / 0.00	256 / 4.20	438 / 9.12	390 / 11.00			1.8			1340	60	495	285	40	Maximum 2400.	
3/9 1220	235	60	12.2	122	2680	7.6	10.31[f]		368 / 16.01		0.0 / 0.00	236 / 3.87	470 / 9.79	449 / 12.66			1.9			1520	61	516	322	20	Minimum 2.3	
4/13 1330	157	64	13.0	136	2450	8.2	9.86[c]		318 / 13.83		0.0 / 0.00	276 / 4.52	340 / 7.08	436 / 12.30			0.9			1390	58	493	267	10		
5/4 1125	200	65	12.3	130	1350	7.5	61 / 3.04	33 / 2.73	158 / 6.87	4.4 / 0.11	0.0 / 0.00	193 / 3.16	164 / 3.41	234 / 6.60	3.2 / 0.05	0.3 / 0.02	0.4	18	Fe 0.04, Al 0.28, Cu 0.01, PO_4 0.20, ABS 0.0	771	54	228	70	50		
6/8 0850	217	72	7.7	88	1480	8.2	6.36[c]		192 / 8.35		0.0 / 0.00	191 / 3.13	211 / 4.39	235 / 6.63			0.9			840	57	318	161	68		
7/13 1035	97	80	9.1	111	1710	7.6	8.00[c]		214 / 9.31		0.0 / 0.00	202 / 3.39	225 / 4.68	302 / 8.52			0.9			998	54	400	230	20		
8/3 1145	123	74	8.8	103	1780	7.7	7.32[c]		236 / 10.27		0.0 / 0.00	228 / 3.74	221 / 4.60	334 / 9.42			0.7			1036	58	366	179	29		
9/7 1130	130	74	9.4	110	1200	7.7	52 / 2.59	29 / 2.41	138 / 6.00	3.4 / 0.09	0.0 / 0.00	179 / 2.93	85 / 1.77	212 / 5.98	1.8 / 0.03	0.3 / 0.02	0.4	24	Al 0.04, PO_4 0.50, Zn 0.02, ABS 0.0	634	54	250	103	40		
10/12 1145	83	66	10.0	108	1630	8.0	6.72[c]		212 / 9.22		0.0 / 0.00	204 / 3.34	207 / 4.31	280 / 7.90			0.5			926	58	336	169	20		
11/8 1405	71	61	10.7	109	1910	8.2	8.08[c]		254 / 11.05		0.0 / 0.00	204 / 3.34	257 / 5.35	365 / 10.30			0.5			1028	58	404	237	10		
12/5 1120		51	9.4	85	1350	7.6	5.40[c]		175 / 7.67		0.0 / 0.00	208 / 3.41	164 / 3.41	230 / 6.49			0.8			767	58	270	99	30		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT JERSEY POINT (STA. 28b)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm[g]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
3/14 1410		56			235															168						USBR
4/10 1345		62			184															234						USBR
5/11 1100		63			195				15					16						92	33					USBR
6/12 1425		69			255															160						USBR
7/17 1225		77			1655															1002						USBR
8/14 0935		70			2719															1718						USBR
9/18 1025		67			566															342						USBR
10/16 1130		--			806															416						USBR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE (STA. 26a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pHb	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/7 1040	1165	45	9.9	82	729	7.6	—/3.04c		88/3.83		0.0/0.00	108/1.77		122/3.44			0.3			406	56	152	63	15	Median 230.	
2/10 1400		60	8.0	80	1160	7.5	—/4.74c		143/6.22		0.0/0.00	167/2.74		198/5.58			0.6			648	57	237	100	20	Maximum 2400.	
3/9 1200	405	64	9.6	100	1460	7.8	—/6.08c		165/7.18		0.0/0.00	177/2.90		287/8.09			0.6			814	54	304	159	30	Minimum 23.	
4/10 1300	240	68	10.7	116	1500	8.0	—/6.13c		176/7.66		0.0/0.00	193/3.16		325/9.16			0.4			838	55	316	158	30		
5/9 1040	495	72	11.9	135	1100	8.1	53/2.64	28/2.30	126/5.48	8.2/0.21	0.0/0.00	175/2.87	88/1.83	206/5.81	3.1/0.05	0.1/0.01	0.4	30	Fe 0.01, PO4 0.90, Al 0.11, As 0.01, ABS 0.0	629	52	247	103	40		
6/6 1345	300	77	8.2	97	1240	7.5	—/5.88c		152/6.61		0.0/0.00	192/3.15		258/7.28			0.4			690	53	294	137	41		
7/20 1430	50	78	7.9	95	1560	7.9	78/3.89	35/2.90	178/7.74	5.9/0.15	0.0/0.00	191/3.13	90/1.87	344/9.70	1.5/0.02	0.3/0.02	0.65	26		853	53	340	183			
8/9 1345		79	6.7	82	1800	8.1	—/7.85c		206/8.96		0.0/0.00	202/3.31		404/11.39			0.5			1005	53	392	227	45		
9/12 0920		72	7.4	85	1310	7.8	63/3.14	34/2.82	156/6.79	5.2/0.13	0.0/0.00	222/3.64	112/2.33	254/7.16	4.3/0.07	0.2/0.01	0.4	27	Al 0.04, Zn 0.01, PO4 0.65, As 0.01, ABS 0.0	765	53	298	116	35		
10/9 1130		62	9.9	101	1480	7.3	—/6.72c		184/8.00		0.0/0.00	224/3.67		266/7.50			0.5			825	54	336	152	10		
11/1 1400		60	6.5	65	1420	8.0	—/6.40c		170/7.40		0.0/0.00	212/3.47		265/7.48			0.5			792	54	320	146	30		
12/5 1320		53	6.0	55	1150	7.8	—/4.88c		149/6.48		0.0/0.00	190/3.11		201/5.67			0.5			642	57	244	88	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR MENDOTA (STA. 25)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/12 0730	3	47	9.5	81	331	7.8	1.70[c]		34 / 1.48		0.0 / 0.00	91 / 1.49		42 / 1.18			0.1			192	47	85	10	3	Median 17.	
2/16 0940	4	53	9.7	88	878	8.0	3.76[c]		109 / 4.74		0.0 / 0.00	130 / 2.13		124 / 3.50			0.6			509	56	188	81	10	Maximum 620.	
3/9 0845	160	54	11.0	102	1080	7.9	5.08[c]		104 / 4.52		0.0 / 0.00	126 / 2.07		171 / 4.82			0.5			624	47	254	151		Minimum 0.13	
4/13 0945	290	62	10.5	106	489	8.0	2.77[c]		48 / 2.09		0.0 / 0.00	112 / 1.84		70 / 1.97			0.1			283	43	139	47	20		
5/4 0815	298	61	9.0	90	260	7.5	17 / 0.85	9.0 / 0.74	23 / 1.00	0.9 / 0.02	0.0 / 0.00	84 / 1.38	27 / 0.56	26 / 0.73	0.9 / 0.01	0.2 / 0.01	0.2	17	Fe 0.10, Al 0.15, Cu 0.01, PO_4 0.20, ABS 0.0	162	38	80	11	120		
6/7 0720	382	70	8.1	90	261	8.0	1.54[c]		22 / 0.96		0.0 / 0.00	81 / 1.33		24 / 0.68			0.1			152	38	77	11	112		
7/13 0630	438	77	7.4	88	351	7.8	1.78[c]		32 / 1.39		0.0 / 0.00	95 / 1.56		45 / 1.27			0.1			202	44	89	11	70		
8/3 1800	420	79	7.8	95	723	7.8	2.44[c]		91 / 3.96		0.0 / 0.00	84 / 1.38		155 / 4.37			0.2			418	62	122	53	47		
9/6 1410	305	78	7.9	96	669	7.8	20 / 1.00	16 / 1.32	85 / 3.70	3.2 / 0.08	0.0 / 0.00	89 / 1.46	41 / 0.85	136 / 3.84	1.0 / 0.02	0.0 / 0.00	0.2	15	Al 0.12, Zn 0.01, PO_4 0.25, ABS 0.0	361	61	116	43	50		
10/9 1500	220	66	9.5	101	525	8.0	2.36[c]		60 / 2.61		0.0 / 0.00	109 / 1.79		87 / 2.45			0.2			304	53	118	29	20		
11/8 1145	48	61	12.0	121	752	8.3	3.56[c]		86 / 3.74		1 / 0.03	138 / 2.26		123 / 3.47			0.3			435	51	178	63	35		
12/5 0750	62	50	10.6	94	886	7.8	4.14[c]		94 / 4.09		0.0 / 0.00	150 / 2.46		152 / 4.29			0.4			512	50	207	84	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER ABOVE MERCED RIVER (STA. 30a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in ppm: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							equivalents per million																			
1961																										USBR
1/12 1350		48			1,584	7.5	60	39	207	4.3	0.0	267	228	247	4.3					1,032	59					
2/14 1315		59			2,353	8.0	81	56	299	5.5	0.0	249	378	394	4.3					1,556	60					
3/13 1300		60			2,991	8.1	115	82	384	4.3	0.0	243	514	604	1.2					2,032	57					
4/13 1420		62			2,236	7.5	89	62	276	5.1	0.0	206	334	440	2.5					1,468	56					
5/15 1300		72			1,168	7.8	55	31	133	4.0	0.0	162	155	210	1.0					710	52					
6/15 1330		84			1,412	7.6	65	39	143	3.9	0.0	194	192	239	0.6					894	48					
7/13 0855		69			1,676	8.1	73	49	185	5.1	0.0	201	231	299	3.1					1,074	51					
8/15 1345		77			1,617	7.7	67	42	196	4.3	0.0	188	168	315	0.0					1,002	55					
9/14 1300		72			2,051	7.6	83	59	258	5.9	0.0	215	269	408	2.5					1,314	55					
10/12 1255		64			2,683	7.5	100	76	340	4.3	0.0	227	365	525	0.0					1,740	57					
11/14 1240		55			3,953	7.7	157	121	552	4.7	0.0	268	614	895	2.5					2,716	57					
12/18 1250		50			2,064	7.7	81	56	276	5.9	0.0	232	322	380	1.9					1,336	58					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT MOSSDALE BRIDGE (STA. 102)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961	Tidal																								Median 56. Maximum 7000. Minimum 2.3	USGS
1/12 1550		51	9.8	87	788	7.3/7.7	3.36[c]		74/3.22		0/0.00	124/2.03		134/3.78			0.3			445[e]	49	168	66	10		
2/17 0905		53	10.0	92	1,130	7.3/7.7	4.80[c]		129/5.61		0/0.00	168/2.75		208/5.87			0.5			640[e]	54	240	102	3		
3/9 1545		58	14.2	138	1,320	8.1/8.0	5.80[c]		151/6.57		0/0.00	188/3.08		244/6.88			0.5			747[e]	53	290	136	25		
4/14 1030		66	6.8	72	1,430	7.7/7.6	6.18[c]		162/7.05		0/0.00	170/2.79		262/7.39			0.4			810[e]	53	309	170	7		
5/4 1550		67	12.8	138	1,200	8.3/7.9	59/2.94	29/2.36	139/6.05	6.0/0.15	0/0.00	173/2.84	70/1.46	242/6.82	0.5/0.01	0.1/0.01	0.3	14	PO_4 0.30 Fe 0.02[d] Zn 0.01 ABS 0.0	645[f]	53	265	118	15		
6/8 1240		73	11.1	127	1,260	8.4/7.9	5.88[c]		148/6.44		0/0.00	191/3.13		248/6.99			0.4			713[e]	52	294	137	15		
7/14 0715		79	9.6	117	815	8.4/7.7	3.66[c]		85/3.70		0/0.00	150/2.46		153/4.31			0.3			461[e]	50	183	60	45		
8/9 0915		80	8.7	107	580	7.6/7.8	2.83[c]		61/2.65		0/0.00	140/2.29		97/2.74			0.2			328[e]	48	141	26	-		
9/7 0850		74	8.4	97	1,410	/8.2	67/3.34	33/2.74	161/7.00	5.6/0.14	0/0.00	216/3.54	91/1.89	280/7.90	0.8/0.01	0.2/0.01	0.3	23	Zn 0.03 PO_4 0.50[d] ABS 0.0	768[f]	53	304	127	30		
10/9 1045		60	15.2	151	1,460	7.6/8.0	6.40[c]		190/8.26		0/0.00	224/3.67		289/8.15			0.6			826[e]	56	320	136	20		
11/13 1230		55	11.2	106	964	7.7/8.0	4.40[c]		113/4.92		0/0.00	155/2.54		163/4.60			0.2			546[e]	53	220	93	10		
12/12 0915		44	11.1	91	1,060	7.6/7.7	4.88[c]		122/5.31		0/0.00	194/3.18		179/5.05			0.4			600[e]	52	244	85	6		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT PATTERSON WATER COMPANY (STA. 27a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							equivalents per million																			
1961																										USBR
1/13 1115		44			1,290	7.6	50	32	164	4.3	0.0	239	167	192	4.3					854	58					
2/14 1230		59			1,675	7.8	62	40	198	3.5	0.0	206	249	268	4.3					1,046	57					
3/13 1230		60			1,780	8.0	75	42	214	3.1	0.0	206	275	311	1.2					1,138	56					
4/13 1330		61			1,429	7.4	64	36	169	5.1	0.0	193	182	253	1.9					916	54					
5/15 1215		72			1,079	7.8	49	29	125	3.0	0.0	173	137	182	1.0					644	53					
6/15 1245		84			1,462	7.8	64	38	155	3.9	0.0	203	187	258	0.6					904	51					
7/13 0750		68			1,793	7.6	81	44	203	3.9	0.0	222	219	332	7.4					1,122	53					
8/15 1300		76			1,583	7.6	72	37	190	4.3	0.0	217	171	295	3.7					982	55					
9/15 1125		69			1,395	7.8	65	33	167	5.1	0.0	207	159	256	2.5					872	54					
10/12 1215		64			1,709	7.4	75	46	212	4.3	0.0	233	235	313	0.0					1,118	55					
11/14 1200		55			1,734	7.3	77	48	218	3.5	0.0	194	241	327	3.7					1,124	55					
12/18 1150		50			1,667	7.8	73	43	212	4.7	0.0	206	223	292	5.0					1,030	56					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION(NO. 5)

SAN JOAQUIN RIVER ABOVE SALT SLOUGH (STA. 111b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in ppm / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USBR
1/12 1450		48			801	7.7	36	16	112	4.3	0.0	341	24	80	2.5					538	60					
2/14 1355		59			898	7.8	45	23	89	4.3	0.0	173	86	123	1.9					528	48					
3/13 1420		59			1,285	8.0	62	28	151	2.0	0.0	206	126	228	1.9					762	55					
4/13 1530		63			1,098	7.6	60	29	113	5.1	0.0	185	102	194	0.6					710	47					
5/15 1355		74			757	8.2	46	18	81	3.0	0.0	159	81	118	0.0					446	48					
6/15 1445		84			927	7.6	51	24	89	3.9	0.0	176	82	153	0.6					544	46					
7/13 1020		70			946	7.6	54	22	92	3.1	0.0	190	74	150	3.7					580	46					
8/15 1450		80			1,206	7.9	60	26	129	4.3	0.0	174	67	243	0.0					722	52					
9/14 1400		74			1,190	7.8	61	29	129	5.1	0.0	190	80	242	0.6					722	50					
10/12 1400		64			1,070	7.6	54	24	128	4.3	0.0	194	68	203	0.0					620	54					
11/14 1330		55			2,059	7.7	56	31	292	4.7	0.0	273	118	458	0.0					1,202	69					
12/18 1355		50			1,296	8.1	59	19	169	3.9	0.0	270	72	243	0.6					746	61					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT SAN ANDREAS LANDING (STA. 112b)

Date and time sampled P.S.T. 1961	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total[g] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1/16 1045		46			199	7.0	13	7.7	12	1.2	0.0	72	14	11	0.0					194	29					USBR
2/20 1010		--			229	7.4	16	9.2	16	0.8	0.0	61	21	23	1.2					186	31					USBR
3/13 1150		56			175	8.1	13	8.1	11	1.6	0.0	76	11	14	0.6					128	26					USBR
4/10 1305		60			144	7.5	13	6.0	8.0	1.0	0.0	59	10	10	0.0					126	23					USBR
5/15 1430		64			170	7.0	12	8.5	14	1.2	0.0	71	12	12	0.0					124	31					USBR
6/12 1135		69			195	7.8	14	8.4	15	1.6	0.0	82	12	11	0.0					126	32					USBR
7/17 1155		75			287	7.5	14	10	29	1.6	0.0	71	17	50	0.6					192	44					USBR
8/14 1315		71			216	8.1	13	9.2	19	1.2	0.0	77	13	22	0.0					140	37					USBR
9/18 1330		69			312	7.5	17	13	28	2.0	0.0	100	16	36	0.0					190	38					USBR
10/25 1020		--			215	7.1	16	9.2	14	2.3	0.0	87	4.8	16	1.9					126	28					USBR
11/13 1150		57			227	7.1	15	11	17	1.6	0.0	86	12	19	0.6					152	31					USBR
12/11 0950		48			213	7.3	15	8.9	15	1.6	0.0	66	22	18	0.6					146	30					USBR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR VERNALIS (STA. 27)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/12 1420	1260	50	10.0	88	836	7.6	3.58[c]		99 / 4.31		0.0 / 0.00	140 / 2.29		134 / 3.78			0.4			474	55	179	64	20	Median 220.	
2/17 0715	990	53	7.7	70	1110	7.7	4.56[c]		143 / 6.22		0.0 / 0.00	162 / 2.66		189 / 5.33			0.5			627	58	228	95	8	Maximum 2400.	
3/9 1435	433	60	10.9	109	1380	7.6	5.88[c]		159 / 6.92		0.0 / 0.00	177 / 2.90		268 / 7.56			0.5			780	54	294	149	15	Minimum 2.3	
4/13 1540	145	66	13.5	144	1630	8.0	7.30[c]		190 / 8.26		0.0 / 0.00	190 / 3.11		3.50 / 9.87			0.4			922	53	365	209	9		
5/4 1300	211	67	14.1	152	1420	7.5	75 / 3.74	31 / 2.58	156 / 6.79	5.0 / 0.13	0.0 / 0.00	198 / 3.25	77 / 1.60	310 / 8.74	4.5 / 0.07	0.3 / 0.02	0.5	27	Fe 0.01, Al 0.11, Cu 0.01, Zn 0.01, PO_4 0.55, ABS 0.1	784	51	316	154	50		
6/8 1045	245	73	10.4	119	1340	8.0	6.04[c]		160 / 6.96		0.0 / 0.00	190 / 3.11		272 / 7.67			0.6			757	54	302	146	33		
7/13 1300	59	83	15.4	189	1830	7.8	8.20[c]		204 / 8.87		0.0 / 0.00	190 / 3.11		435 / 12.27			0.5			1083	52	410	254	30		
8/3 1305	57	81	13.8	171	1790	7.6	7.88[c]		204 / 8.87		0.0 / 0.00	194 / 3.18		418 / 11.79			0.6			1011	53	394	235	20		
9/7 1235	316	74	13.0	150	1320	7.6	64 / 3.19	34 / 2.77	141 / 6.13	4.2 / 0.11	0.0 / 0.00	205 / 3.36	48 / 1.00	262 / 7.39	1.0 / 0.02	0.1 / 0.01	0.5	23	Al 0.01, Zn 0.01, PO_4 0.25, ABS 0.1	679	50	298	130	70		
10/13 1135	395	66	10.2	110	1410	7.7	6.48[c]		166 / 7.22		0.0 / 0.00	222 / 3.64		265 / 7.47			0.4			795	53	324	142	20		
11/9 1345	650	56	9.5	91	873	8.0	4.04[c]		100 / 4.85		0.0 / 0.00	138 / 2.26		152 / 4.29			0.2			493	52	202	89	25		
12/6 1100		52	8.4	86	1020	7.6	4.48[c]		122 / 5.31		0.0 / 0.00	178 / 2.92		180 / 5.08			0.4			576	54	224	78	6		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR VERNALIS (STA. 27) (continued)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/1-10					712	8.0	36 / 1.80	14 / 1.16	73 / 3.18	2.7 / 0.07	0.0 / 0.00	111 / 1.82	68 / 1.42	112 / 3.16	2.1 / 0.03	0.1 / 0.01	0.2	24		387	51	148	57			
1/11-20					831	8.0	39 / 1.95	18 / 1.45	101 / 4.39	2.8 / 0.07	0.0 / 0.00	142 / 2.33	90 / 1.87	135 / 3.81	3.2 / 0.05	0.2 / 0.01	0.4	24		484	56	170	54			
1/21-31					838	7.9	38 / 1.90	17 / 1.42	102 / 4.44	3.4 / 0.09	0.0 / 0.00	128 / 2.10	94 / 1.96	142 / 4.00	3.6 / 0.06	0.3 / 0.02	0.4	21		485	54	166	61			
2/1-5					811	7.7	38 / 1.90	19 / 1.54	88 / 3.83	5.0 / 0.13	0.0 / 0.00	133 / 2.18	85 / 1.77	128 / 3.61	4.9 / 0.08	0.2 / 0.01	0.4	18	Fe 0.01	452	52	172	63			
2/7-17					1070	7.5	48 / 2.40	25 / 2.02	123 / 5.35	5.0 / 0.13	0.0 / 0.00	164 / 2.69	111 / 2.31	180 / 5.08	6.5 / 0.10	0.2 / 0.01	0.5	26	Fe 0.01	606	54	221	87			
2/18-28					1140	8.1	44 / 2.20	32 / 2.60	132 / 5.74	3.8 / 0.10	0.0 / 0.00	162 / 2.66	120 / 2.50	198 / 5.58	5.2 / 0.08	0.3 / 0.02	0.6	26		642	54	240	107			
3/1-9					1220	7.9	58 / 2.89	28 / 2.33	139 / 6.05	4.0 / 0.10	0.0 / 0.00	166 / 2.72	109 / 2.27	224 / 6.32	5.2 / 0.08	0.2 / 0.01	0.5	26		676	53	261	125			
3/10-19					1310	8.3	68 / 3.39	30 / 2.49	143 / 6.22	6.2 / 0.16	12 / 0.40	163 / 2.67	74 / 1.54	280 / 7.90	5.1 / 0.08	0.2 / 0.01	0.4	33	Fe 0.01	732	51	294	141			
3/20-31					1290	8.1	29 / 1.45	55 / 4.49	143 / 6.22	4.6 / 0.12	0.0 / 0.00	210 / 3.44	97 / 2.02	252 / 7.11	4.3 / 0.07	0.2 / 0.01	0.5	27		716	51	297	125			
4/1-12					1480	7.4	79 / 3.94	32 / 2.66	163 / 7.09	2.8 / 0.07	0.0 / 0.00	180 / 2.95	82 / 1.71	328 / 9.25	3.6 / 0.06	0.2 / 0.01	0.4	29		809	52	330	182			
4/13-18					1600	7.4	87 / 4.34	34 / 2.82	173 / 7.53	3.2 / 0.08	0.0 / 0.00	176 / 2.88	81 / 1.69	370 / 10.43	5.4 / 0.09	0.2 / 0.01	0.5	31	Fe 0.01	872	51	358	214			
4/19-21					1780	7.3	94 / 4.69	43 / 3.51	200 / 8.70	2.6 / 0.07	0.0 / 0.00	178 / 2.92	100 / 2.08	415 / 11.70	5.5 / 0.09	0.2 / 0.01	0.6	25	Fe 0.07	974	51	410	264			
4/22-30					1340	7.3	71 / 3.54	39 / 3.20	144 / 6.26	3.1 / 0.08	0.0 / 0.00	176 / 2.88	78 / 1.62	282 / 7.95	6.1 / 0.10	0.2 / 0.01	0.4	28	Fe 0.01	739	48	337	193			
5/1-7					1390	7.6	72 / 3.59	32 / 2.63	165 / 7.18	5.5 / 0.14	0.0 / 0.00	193 / 3.16	84 / 1.75	288 / 8.12	0.5 / 0.01	0.1 / 0.01	0.4	27		770	53	311	153			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR VERNALIS (STA. 27) (continued)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
5/8-16					1210	7.6	62 / 3.09	29 / 2.35	138 / 6.00	5.2 / 0.13	0.0 / 0.00	190 / 3.11	92 / 1.92	222 / 6.26	0.3 / 0.00	0.2 / 0.01	0.4	24		667	52	272	116			
5/17-30					1250	8.2	64 / 3.19	31 / 2.53	151 / 6.57	5.0 / 0.13	0.0 / 0.00	193 / 3.16	92 / 1.92	250 / 7.05	1.9 / 0.03	0.2 / 0.01	0.5	30		721	53	286	128			
6/1-9					1360	7.6	70 / 3.49	32 / 2.63	149 / 6.48	5.8 / 0.15	0.0 / 0.00	195 / 3.20	85 / 1.77	272 / 7.67	3.6 / 0.06	0.1 / 0.01	0.4	32		746	51	306	146			
6/10-20					1500	7.6	76 / 3.79	35 / 2.85	170 / 7.40	5.6 / 0.14	0.0 / 0.00	195 / 3.20	86 / 1.79	328 / 9.25	3.5 / 0.06	0.1 / 0.01	0.6	33		834	52	332	172			
6/21-30					1550	7.6	78 / 3.89	36 / 2.99	172 / 7.48	6.0 / 0.15	0.0 / 0.00	194 / 3.18	88 / 1.83	345 / 9.73	3.7 / 0.06	0.1 / 0.01	0.4	35	Fe 0.02	860	52	344	185			
7/1-10					1500	7.7	77 / 3.84	35 / 2.88	160 / 6.96	5.6 / 0.14	0.0 / 0.00	202 / 3.31	57 / 1.19	318 / 8.97	2.2 / 0.04	0.2 / 0.01	0.5	36	Fe 0.02	792	50	336	170			
7/11-20					1790	7.6	91 / 4.54	42 / 3.46	192 / 8.35	5.6 / 0.14	0.0 / 0.00	188 / 3.08	60 / 1.25	410 / 11.56	3.1 / 0.05	0.1 / 0.01	0.6	32		929	51	400	246			
7/20-21					2060	7.8	102 / 5.09	46 / 3.81	230 / 10.00	5.6 / 0.14	0.0 / 0.00	188 / 3.08	68 / 1.42	495 / 13.96	2.3 / 0.04	0.1 / 0.01	0.5	29		1070	53	445	291			
7/22-31					1770	7.6	87 / 4.34	43 / 3.56	196 / 8.53	6.0 / 0.15	0.0 / 0.00	190 / 3.11	96 / 2.00	405 / 11.42	3.1 / 0.05	0.1 / 0.01	0.6	31		962	51	395	239			
8/1-9					1800	7.5	91 / 4.54	42 / 3.46	204 / 8.87	5.6 / 0.14	0.0 / 0.00	197 / 3.23	90 / 1.87	407 / 11.48	3.7 / 0.06	0.1 / 0.01	0.5	34		975	52	400	238			
8/10-11					2270	7.6	111 / 5.54	55 / 4.52	256 / 11.14	6.0 / 0.15	0.0 / 0.00	190 / 3.11	124 / 2.58	543 / 15.31	2.7 / 0.04		0.8	30		1220	52	503	347			
8/12-20					1560	7.8	81 / 4.04	35 / 2.98	177 / 7.70	6.0 / 0.15	0.0 / 0.00	204 / 3.34	69 / 1.44	342 / 9.64	3.0 / 0.05	0.2 / 0.01	0.5	35	Fe 0.01	849	52	346	179			
8/21-31					1520	7.7	76 / 3.79	35 / 2.89	175 / 7.61	6.0 / 0.15	0.0 / 0.00	217 / 3.56	107 / 2.23	312 / 8.80	2.5 / 0.04	0.2 / 0.01	0.7	31	Fe 0.01	852	53	334	156			
9/1-5					1440	7.9	66 / 3.29	35 / 2.87	174 / 7.57	5.6 / 0.14	0.0 / 0.00	228 / 3.74	109 / 2.27	295 / 8.32	2.6 / 0.04	0.2 / 0.01	0.6	31	Fe 0.13	831	55	308	121			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER NEAR VERNALIS (STA. 27) (continued)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										
9/6-17					1370	8.2	60 / 2.99	43 / 3.53	161 / 7.00	5.2 / 0.13	0.0 / 0.00	222 / 3.64	88 / 1.83	278 / 7.84	4.7 / 0.08	0.2 / 0.01	0.5	33	Fe 0.04	783	51	326	144			
9/18-30					1430	8.4	67 / 3.34	37 / 3.06	165 / 7.18	5.0 / 0.13	8 / 0.27	208 / 3.41	112 / 2.33	285 / 8.04	2.9 / 0.05	0.1 / 0.01	0.5	31		816	52	320	136			
10/1-10					1500	7.8	73 / 3.64	37 / 3.06	178 / 7.74	2.8 / 0.07	0.0 / 0.00	226 / 3.70	120 / 2.50	276 / 7.79	2.3 / 0.04	0.1 / 0.01	0.4	35	Fe 0.02	836	53	335	150			
10/11-21					1300	7.6	69 / 3.44	34 / 2.76	160 / 6.96	2.8 / 0.07	0.0 / 0.00	220 / 3.61	111 / 2.31	244 / 6.88	3.4 / 0.05	0.1 / 0.01	0.4	37	Fe 0.01	770	53	310	130			
10/22-31					1300	8.0	64 / 3.19	34 / 2.81	151 / 6.57	3.4 / 0.09	0.0 / 0.00	210 / 3.44	108 / 2.25	230 / 6.49	42 / 0.07	0.1 / 0.01	0.3	35	Fe 0.01	733	52	300	128			
11/1-10					1060	7.6	52 / 2.59	33 / 2.69	122 / 5.31	3.6 / 0.09	0.0 / 0.00	178 / 2.92	89 / 1.85	193 / 5.44	4.6 / 0.07	0.2 / 0.01	0.2	36	Fe 0.02	659	50	264	118			
11/11-20					1070	8.0	51 / 2.54	31 / 2.54	122 / 5.31	3.8 / 0.10	0.0 / 0.00	174 / 2.85	95 / 1.98	195 / 5.50	4.6 / 0.07	0.2 / 0.01	0.3	32	Fe 0.02	665	51	254	111			
11/21-30					1100	7.9	53 / 2.64	30 / 2.44	132 / 5.74	5.2 / 0.13	0.0 / 0.00	188 / 3.08	96 / 2.00	194 / 5.47	4.6 / 0.07	0.2 / 0.01	0.4	33	Fe 0.02	663	52	254	100			
12/1-10					1020	7.8	48 / 2.40	28 / 2.28	122 / 5.31	5.4 / 0.14	0.0 / 0.00	186 / 3.05	85 / 1.77	172 / 4.85	3.1 / 0.08	0.3 / 0.02	0.4	29	Fe 0.03	609	52	234	81			
12/11-20					1150	8.1	56 / 2.79	32 / 2.61	139 / 6.05	4.6 / 0.12	0.0 / 0.00	196 / 3.21	107 / 2.23	204 / 5.75	5.2 / 0.08	0.2 / 0.01	0.4	31	Fe 0.02	701	52	270	109			
12/21-31					1210	8.1	54 / 2.69	36 / 2.99	146 / 6.35	4.2 / 0.11	0.0 / 0.00	194 / 3.18	115 / 2.39	214 / 6.04	5.2 / 0.08	0.2 / 0.01	0.4	33	Fe 0.03	743	52	284	125			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT WEST STANISLAUS I. D. INTAKE (STA. 27b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USBR
1/13 1150		44			1,453	7.3	56	40	177	4.3	0.0	229	196	236	8.7					948	56					
2/15 1125		54			1,865	7.9	65	66	198	3.5	0.0	259	254	315	5.0					1,194	49					
3/13 1145		58			1,819	8.0	76	53	207	3.1	0.0	229	273	312	1.9					1,148	52					
4/13 1245		61			1,540	7.5	69	48	164	5.1	0.0	214	208	274	0.6					986	49					
5/15 1145		72			1,142	7.2	50	36	125	3.0	0.0	193	134	195	0.0					704	49					
6/15 1200		82			1,422	7.8	64	53	133	3.5	0.0	224	177	245	1.2					1,086	43					
7/13 0720		68			1,422	7.8	69	50	136	3.9	0.0	203	124	281	3.1					944	44					
8/15 1215		74			1,536	7.6	64	53	159	4.3	0.0	230	175	270	3.1					946	47					
9/14 1050		67			1,484	7.8	68	50	161	5.1	0.0	226	180	266	3.1					904	48					
10/12 1130		64			1,645	7.4	72	52	200	4.3	0.0	236	216	299	0.0					1,068	52					
11/14 1140		55			1,765	7.6	79	56	212	3.5	0.0	220	244	320	3.7					1,126	51					
12/18 1120		49			1,655	7.9	74	53	203	4.7	0.0	232	228	292	5.6					1,066	52					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

SAN JOAQUIN RIVER AT WHITEHOUSE (STA. 24b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USBR
2/1 1330	32	54			72															64						
2/17 1130	13	55			92															82						
3/2 0930	27	55			73															56						
3/15 1230	30	61			76															62						
4/3 1150	2	71			75	7.0	6.0	3.0	8.0	2.0	0.0	29	2.0	11	0.0					64	38					
4/18 1215	24	65			73															56						
5/1 1515	20	71			70															72						
5/16 1210	35	72			81															88						
6/2 1340	8	73			75	6.7	3.0	2.8	6.9	0.0	0.0	26	3.4	8.2	0.0					48	44					

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

STANISLAUS RIVER NEAR MOUTH (STA. 29)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/12 1505	216	50	11.4	101	155	7.8	—/1.30[c]		7.1/0.31		0.0/0.00	82/1.34		2.8/0.08			0.0			105	19	65	0	3	Median 23.	
2/17 0800	152	53	8.7	79	255	8.0	—/1.98[c]		14/0.61		0.0/0.00	12.9/2.11		7.2/0.20			0.0			172	24	99	0	10	Maximum 7000.	
3/9 1500	27.2	60	9.9	99	308	7.7	—/2.34[c]		18/0.78		0.0/0.00	164/2.69		7.4/0.21			0.0			208	25	117	0	10	Minimum 5.	
4/13 1630	47	66	8.0	85	335	7.7	—/2.95[c]		17/0.74		0.0/0.00	204/3.34		11/0.31			0.0			226	20	148	0	50		
5/4 1340	35 (est)	69	10.6	117	315	7.7	30/1.50	12/1.02	19/0.83	2.1/0.05	0.0/0.00	182/2.98	10/0.21	9.0/0.25	0.6/0.01	0.1/0.01	0.1	34	Fe 0.01, PO_4 0.01, ABS 0.0	207	24	126	0	10		
6/8 1130	20 (est)	72	8.0	91	321	8.0	31/1.55[c]	14/1.13	20/0.87		0.0/0.00	175/2.87		24/0.68			0.1			216	25	134	0	7		
7/13 1345		87	10.3	136	279	7.8	—/2.32[c]		12/0.52		0.0/0.00	152/2.49		9.3/0.26			0.0			188	18	112	0	10		
8/3 1400	0.65	81	9.4	117	283	7.1	—/2.44[c]		13/0.57		0.0/0.00	153/2.51		12/0.34			0.0			191	19	122	0	18		
9/7 1310	1.35	79	8.3	102	287	7.4	29/1.45	12/0.95	14/0.61	1.5/0.04	0.0/0.00	159/2.61	7.0/0.15	9.0/0.25	0.4/0.01	0.3/0.02	0.0	29	Zn 0.02, PO_4 0.05, ABS 0.0	180	20	120	0	5		
10/13 1055	27.90	66	6.8	74	330	7.6	—/2.66[c]		21/0.91		0.0/0.00	184/3.02		9.5/0.27			0.1			222	25	133	0	10		
11/9 1330	48	56	10.9	105	279	8.1	—/2.18[c]		17/0.74		0.0/0.00	150/2.46		10/0.28			0.0			188	25	109	0	6		
12/6 1150	289	52	9.8	89	261	7.5	—/2.14[c]		14/0.61		0.0/0.00	133/2.18		9.2/0.26			0.0			176	22	107	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

STANISLAUS RIVER BELOW TULLOCH DAM (STA. 29A)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/3 1205	85	49	10.9	95	65.9	7.6	—/0.56[c]		2.4/0.10		0.0/0.00	36/0.59		0.0/0.00			0.0			46	15	28	0	3	Median 2.3.	
2/6 1230	0	53	11.1	102	79.1	7.7	—/0.70[c]		3.4/0.15		0.0/0.00	37/0.61		1.0/0.03			0.0			55	18	35	5	4	Maximum 130.	
3/1 1410	775	53	10.4	95	73	7.4	—/0.62[c]		2.7/0.12		0.0/0.00	45/0.74		0.2/0.01			0.0			51	16	31	0	2	Minimum 0.046.	
4/3 1445		62	11.1	113	75	7.6	—/0.65[c]		1.3/0.06		0.0/0.00	37/0.61		2.5/0.07			0.1			52	8	33	3	1		
5/8 1315	700	55	9.2	87	56	7.4	5.2/0.26	2.7/0.22	1.9/0.08	0.7/0.02	0.0/0.00	30/0.49	2.0/0.04	1.0/0.03	0.1/0.00	0.1/0.01	0.0	17	Al 0.02, PO_4 0.05, ABS 0.0	46	14	24	0	1		
6/5 0900	1050	58	8.2	80	50	7.4	4.9/0.24[c]	2.1/0.17	2.0/0.09		0.0/0.00	28/0.46		0.2/0.01			0.1			35	18	20	0	0.9		
7/12 1130	1310	70	6.7	74	52	7.5	—/0.39[c]		2.0/0.09		0.0/0.00	28/0.46		0.2/0.01			0.0			36	19	20	0	3		
8/4 1235	1290	75	5.3	63	65	7.7	—/0.54[c]		2.5/0.11		0.0/0.00	33/0.54		2.2/0.06			0.0			45	17	27	0	6		
9/8 1010	580	73	7.2	82	63	7.3	5.6/0.28	2.8/0.23	2.6/0.11	0.3/0.01	0.0/0.00	35/0.57	0.0/0.00	1.2/0.03	0.3/0.00	0.1/0.01	0.0	8.9	PO_4 0.05, ABS 0.0	39	17	26	0	20		
10/11 1145	0		8.6		74	7.3	—/0.70[c]		2.1/0.09		0.0/0.00	37/0.61		0.8/0.02			0.0			52	11	35	5			
11/9 1205	20	59	9.5	94	69	7.8	—/0.58[c]		1.9/0.08		0.0/0.00	36/0.59		1.5/0.04			0.0			48	12	29	0	3		
12/7 1300		54	5.7	53	90	7.1	—/0.82[c]		2.7/0.12		0.0/0.00	43/0.70		1.5/0.04			0.0			63	13	41	6	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

STOCKTON SHIP CHANNEL ON RINDGE ISLAND (STA. 100)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961 1/5 1500	Tidal	45	5.8	48	788	7.0 / 7.6	3.64[c]		88 / 3.83		0 / 0.00	116 / 1.90		130 / 3.67			0.3			438[e]	51	182	87	70	Median 560.	USGS
2/9 1145		54	6.7	62	856	7.3 / 7.7	3.96[c]		79 / 3.44		0 / 0.00	117 / 1.92		153 / 4.31			0.3			476[e]	46	198	102	35	Maxium 7000.	
3/10 1100		54	8.6	80	681	7.3 / 7.5	3.27[c]		69 / 3.00		0 / 0.00	117 / 1.92		112 / 3.16			0.3			379[e]	48	164	68	85	Minium 23.	
4/5 1545		64	10.6	110	529	8.1 / 7.8	2.75[c]		52 / 2.26		0 / 0.00	107 / 1.75		80 / 2.26			0.2			295[e]	45	138	50	35		
5/11 1115		67	9.1	98	317	7.9 / 7.8	19 / 0.95	11 / 0.89	28 / 1.22	1.8 / 0.05	0 / 0.00	83 / 1.36	21 / 0.44	42 / 1.18	0.9 / 0.01	0.2 / 0.01	0.1	15	Fe 0.01 Al 0.06 PO_4 0.25 ABS 0.1 [d]	180[f]	39	92	24	45		
6/1 0840		67	7.5	81	279	7.3 / 8.1	1.70[c]		24 / 1.04		0 / 0.00	85 / 1.39		33 / 0.93			0.0			155[e]	38	85	15	30		
7/12 1530		78	6.5	78	297	7.4 / 7.9	1.72[c]		25 / 1.09		0 / 0.00	90 / 1.48		33 / 0.93			0.1			165[e]	39	86	12	60		
8/9 0910		70	7.7	86	450	7.0 / 7.5	1.84[c]		52 / 2.26		0 / 0.00	90 / 1.48		82 / 2.31			0.1			250[e]	55	92	18	-		
9/7 1045		74	7.6	88	415	6.9 / 8.0	17 / 0.85	13 / 1.07	46 / 2.00	2.4 / 0.06	0 / 0.00	89 / 1.46	19 / 0.40	69 / 1.95	2.7 / 0.04	0.1 / 0.01	0.0	19	Al 0.18 Cu 0.01 Zn 0.02 PO_4 0.40 ABS 0.0 [d]	232[f]	50	96	23	25		
10/4 1430		73	6.8	78	411	7.4 / 8.0	2.02[c]		42 / 1.83		0 / 0.00	104 / 1.70		63 / 1.78			0.1			228[e]	48	101	16	50		
11/8 1110		58	7.7	75	601	7.2 / 8.0	2.75[c]		65 / 2.83		0 / 0.00	125 / 2.05		97 / 2.74			0.1			334[e]	51	137	35	15		
12/11 1030		49	8.6	75	726	7.2 / 8.1	3.36[c]		78 / 3.39		0 / 0.00	130 / 2.13		125 / 3.53			0.2			403[e]	50	168	61	15		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

STONY CREEK AT BLACK BUTTE DAM SITE (STA. 13c)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/2 1530	54	52	11.1	101	423	7.9 / 8.4	47 / 2.35	15 / 1.23	20 / 0.87	0.5 / 0.01	4 / 0.13	166 / 2.72	27 / 0.56	35 / 0.99	0.5 / 0.01	0.0 / 0.00	0.2	11	Tot. Alk. 174	242[f]	20	179	36			USGS
2/15 0845	900	49	10.8	94	232	7.6 / 8.1	26 / 1.30	6.8 / 0.56	12 / 0.52	0.2 / 0.01	0.0 / 0.00	98 / 1.61	14 / 0.29	14 / 0.39	0.4 / 0.01	0.1 / 0.01	0.1	12		134[f]	22	93	13			
3/2 1420	180	59	9.9	97	348	7.7 / 8.3	2.93[c]		17 / 0.74		1 / 0.03	149 / 2.44		20 / 0.56			0.0		Tot. Alk. 151	205[e]	20	147	23	1		
4/10 1430	210	63	9.5	98	258	7.9 / 8.2	2.20[c]		13 / 0.57		0.0 / 0.00	118 / 1.93		14 / 0.39			0.1			152[e]	21	110	17	18		
5/1 1430	155	60	10.0	100	261	7.8 / 8.2	28 / 1.40	9.0 / 0.74	13 / 0.57	0.6 / 0.02	0.0 / 0.00	122 / 2.00	13 / 0.27	13 / 0.37	0.0 / 0.00	0.2 / 0.01	0.1	8.9	Fe 0.02 Al 0.05 Cu 0.01 As 0.01 ABS 0.0 [d]	146[f]	21	107	7	10		
6/7 1005	290	71	8.8	99	286	7.7 / 8.0	2.46[c]		14 / 0.61		0.0 / 0.00	135 / 2.21		16 / 0.45			0.2			169[e]	20	123	12	6		
7/5 1507	175	79	8.0	98	278	8.1 / 8.3	2.26[c]		16 / 0.70		1 / 0.03	134 / 2.20		16 / 0.45			0.2		Tot. Alk. 136	164[e]	24	113	1	47		
8/9 1030	90	78	8.1	98	293	7.9 / 8.2	2.46[c]		15 / 0.65		0.0 / 0.00	152 / 2.49		15 / 0.42			0.3			173[e]	21	123	0	25		
9/6 0805	90	68	8.6	93	310	8.0 / 8.3	30 / 1.50	13 / 1.10	15 / 0.65	0.9 / 0.02	2 / 0.07	157 / 2.57	10 / 0.21	16 / 0.45	0.4 / 0.01	0.1 / 0.01	0.2	11	Tot. Alk. 161 Mn 0.15 Fe 0.31 Cu 0.01 ABS 0.0 Al 0.01 PO_4 0.05 [d]	176[f]	20	130	0	35		
10/9 1135	61	63	9.9	102	348	8.1 / 8.4	2.98[c]		17 / 0.74		4 / 0.13	172 / 2.82		16 / 0.45			0.3		Tot. Alk. 180	205[e]	20	149	1	30		
11/16 1355	18	50	10.3	91	432	8.2 / 8.4	3.66[c]		22 / 0.96		5 / 0.17	206 / 3.38		26 / 0.73			0.3		Tot. Alk. 216	255[e]	21	183	6	70		
12/7 1300	5	52	10.5	95	519	7.7 / 8.1	4.20[c]		26 / 1.13		0.0 / 0.00	189 / 3.10		54 / 1.52			0.1			306[e]	21	210	55	13		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

STONY CREEK NEAR HAMILTON CITY (STA. 13a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/2 1440	18	49	12.3	107	402	7.9 / 8.2	— / 3.30[c]		18 / 0.78		0.0 / 0.00	170 / 2.79		29 / 0.82			0.1			231[e]	19	165	26	4	Median 2.3	USGS
2/15 0745	877	51	10.4	93	283	7.6 / 8.2	— / 2.38[c]		13 / 0.57		0.0 / 0.00	126 / 2.07		16 / 0.45			0.0			163[e]	19	119	16	30	Maximum 23.	
3/2 1220	182	58	10.8	105	351	7.9 / 8.4	— / 2.98[c]		16 / 0.70		1 / 0.03	154 / 2.52		20 / 0.56			0.1		Tot. Alk. 156	202[e]	19	149	21	2	Minimum 0.23	
4/10 1320	144	64	9.7	101	288	8.1 / 8.3	— / 2.42[c]		13 / 0.57		1 / 0.03	133 / 2.18		16 / 0.45			0.2		Tot. Alk. 135	166[e]	19	121	10	10		
5/1 1320	53	62	9.8	100	311	8.2 / 8.4	33 / 1.65	12 / 0.97	14 / 0.61	0.8 / 0.02	5 / 0.17	136 / 2.23	14 / 0.29	16 / 0.45	0.0 / 0.00	0.2 / 0.01	0.1	6.2	Fe 0.01 Al 0.07 Cu 0.01 Zn 0.01 PO_4 0.00 ABS 0.0 d Tot. Alk. 146	168[f]	19	131	11	3		
6/8 1005	1.2	71	7.9	89	329	7.7 / 8.3	— / 2.80[c]		17 / 0.74		4 / 0.13	149 / 2.44		18 / 0.51			0.1		Tot. Alk. 157	189[e]	21	140	11	4		
7/5 1402	DRY																									
8/9 1130	DRY																									
9/6 1210	DRY																									
10/9 1615	DRY																									
11/10 0915	DRY																									
12/7 1445	11	51	11.0	98	472	7.9 / 8.2	— / 3.88[c]		22 / 0.96		0.0 / 0.00	180 / 2.95		44 / 1.24			0.1			271[e]	20	194	46	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

THOMES CREEK NEAR MOUTH (STA. 95b)

Date and time sampled P.S.T.	Discharge in cfs (Est. by Sampler)	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/3 1425		50	11.1	98	239	7.7/8.1	2.22[c]		5.7/0.25		0.0/0.00	117/1.92		3.5/0.10			0.1			145[e]	10	111	15	4		
2/16 1200		49	11.5	100	165	7.6/8.0	1.56[c]		3.8/0.17		0.0/0.00	84/1.38		2.8/0.08			0.1			100[e]	10	78	9	58		
3/14 0910		54	11.2	104	222	7.9/8.3	2.06[c]		5.5/0.24		2/0.07	108/1.77		4.0/0.11			0.0		Tot. Alk. 112	135[e]	10	103	11	2		
4/11 1415		68	9.1	98	166	7.9/8.2	1.61[c]		3.7/0.16		0.0/0.00	86/1.41		3.5/0.10			0.0			101[e]	9	81	10	7		
5/2 1415		68	9.0	98	161	7.7/8.0	23/1.15	5.2/0.43	3.8/0.17	0.6/0.02	0.0/0.00	84/1.38	11/0.23	3.0/0.08	0.0/0.00	0.2/0.01	0.0	11	PO_4 0.00 As 0.05 ABS 0.0 [d]	99[f]	10	79	10	50		
6/7 1440		84	7.3	94	188	7.9/8.2	1.90[c]		3.7/0.16		0.0/0.00	113/1.85		3.8/0.11			0.0			114[e]	8	95	2	4		
7/7 0943		78	9.7	117	261	7.3/8.2	2.50[c]		6.1/0.27		0.0/0.00	139/2.28		4.5/0.13			0.1			159[e]	10	125	11	2		
8/8 1200	3	82	10.2	128	282	7.5/8.4	2.70[c]		5.9/0.26		3/0.10	141/2.31		6.5/0.18			0.1		Tot. Alk. 147	171[e]	9	135	14	5		
9/6 1115	No Flow																									
10/9 1540	DRY																									
11/9 1545	DRY																									
12/8 1145	7	48	11.5	99	323	7.9/8.2	2.91[c]		8.6/0.37		0.0/0.00	138/2.26		13/0.37			0.0			196[e]	11	146	33	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4
ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

THOMES CREEK AT PASKENTA (STA. 13d)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/2 1630	77	41	12.5	98	187	7.5/8.1	—/1.70[c]		6.3/0.27		0.0/0.00	91/1.49		4.5/0.13			0.1			111[e]	14	85	10	4		USGS
2/15 0958	860	46	11.5	97	135	7.7/8.1	—/1.28[c]		3.4/0.15		0.0/0.00	76/1.25		0.5/0.01			0.0			80[e]	10	64	2	60		
3/2 1525	199	54	10.7	99	185	7.8/8.2	—/1.71[c]		5.7/0.25		0.0/0.00	94/1.54		2.2/0.06			0.0			110[e]	13	85	8	1		
4/10 1545	390	59	9.8	96	129	7.8/8.1	—/1.27[c]		3.3/0.14		0.0/0.00	68/1.11		2.6/0.07			0.0			77[e]	10	64	8	10		
5/1 1545	355	58	9.8	95	125	7.4/8.1	17/0.85	3.0/0.25	3.6/0.16	0.7/0.02	0.0/0.00	66/1.08	7.2/0.15	0.2/0.01	0.0/0.00	0.2/0.01	0.0	8.2	Fe 0.03 PO_4 0.00 d Al 0.10 ABS 0.0	73[f]	12	55	1	9		
6/7 1140	161	66	8.6	91	140	7.7/8.0	—/1.37[c]		3.5/0.15		0.0/0.00	70/1.15		2.6/0.07			0.0			83[e]	10	68	11	3		
7/5 1615	20	82	7.4	93	253	7.7/8.5	—/2.30[c]		7.9/0.34		3/0.10	114/1.87		9.5/0.27			0.1		Tot. Alk. 120	151[e]	13	115	17	1		
8/9 0925	9.6	78	7.2	87	328	8.1/7.7	—/2.90[c]		11/0.48		0.0/0.00	133/2.18		19/0.54			0.1			195[e]	14	145	36	400		
9/6 0905	3.4	67	8.0	86	403	7.8/8.2	4.6/2.30	14/1.14	17/0.74	1.3/0.03	0.0/0.00	159/2.61	32/0.67	33/0.93	0.0/0.00	0.0/0.00	0.2	8.9	Fe 0.25 d Al 0.04 PO_4 0.05 ABS 0.0	230[f]	18	172	42	30		
10/9 1325	3.8	65	11.6	122	451	8.1/8.4	—/3.84[c]		19/0.83		7/0.23	154/2.52		39/1.10			0.2		Tot. Alk. 168	268[e]	18	192	54	8		
11/16 1300	2.2	47	11.8	100	469	8.0/8.3	—/3.96[c]		20/0.87		2/0.07	180/2.95		40/1.13			0.2		Tot. Alk. 184	279[e]	18	198	47	4		
12/7 1205	57	41	12.5	98	276	7.7/8.1	—/2.40[c]		10/0.44		0.0/0.00	122/2.00		12/0.34			0.1			164[e]	15	120	20	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS-curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C-4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

TULE RIVER NEAR PORTERVILLE (STA. 91)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/4 1500	23	46	12.8	107	430	8.4	3.60[c]		25 / 1.09		5 / 0.17	229 / 3.75		14 / 0.39			0.2		Total Alkalinity 239	282	23	180	0	30	Median 2.3	
2/7 1430	31	59	10.9	107	403	8.4	3.18[c]		25 / 1.09		6 / 0.20	218 / 3.57		14 / 0.39			0.2		Total Alkalinity 230	264	26	159	0	3	Maximum 2400.	
3/2 1100	30	58	12.1	118	397	8.4	3.26[c]		25 / 1.09		7 / 0.23	213 / 3.49		12 / 0.34			0.2		Total Alkalinity 227	260	25	163	0	30	Minimum 0.23	
4/4 1315		70	9.1	101	269	8.4	2.26[c]		15 / 0.65		4 / 0.13	149 / 2.44		9.0 / 0.25			0.1		Total Alkalinity 157	176	22	113	0	10		
5/9 1350		75	10.0	117	310	8.4	38 / 1.90	8.0 / 0.66	18 / 0.81	2.5 / 0.06	4 / 0.13	170 / 2.79	7.0 / 0.15	9.5 / 0.27	0.3 / 0.00	0.2 / 0.01	0.2	26	Al 0.02, PO 0.05, Total Alkalinity 178, ABS 0.0	198	23	128	0	15		
6/6 0700	9	73	10.1	117	336	7.9	2.80[c]		19 / 0.83		6 / 0.20	184 / 3.02		12 / 0.34					Total Alkalinity 196	220	23	140	0	3		DWR
7	DRY																									
8	DRY																									
9	DRY																									
10	DRY																									
11	DRY																									
12/4 1310	25	56	9.9	95	441	8.0	3.26[c]		31 / 1.35		0.0 / 0.00	2.34 / 3.84	11 / 0.23	18 / 0.51			0.2			289	29	163	0	10		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

TUOLUMNE RIVER BELOW DON PEDRO DAM (STA. 31A)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/7 1615	1660	48	10.0	86	28.3	6.9	—/0.21[c]		2.3/0.10		0.0/0.00	18/0.30		0.2/0.01			0.0			22	32	10	0	4	Median 2.3.	
2/11 0945	175	47	10.3	87	30	7.4	—/0.22[c]		2.3/0.10		0.0/0.00	12/0.20		0.5/0.01			0.1			23	31	11	1	5	Maximum 2400.	
3/9 1455	720	48	9.6	82	31	6.9	—/0.24[c]		1.3/0.06		0.0/0.00	13/0.21		1.0/0.03			0.1			23	20	12	1	10	Minimum 0.23.	
4/10 1040	1580	49	9.4	82	36	7.4	—/0.28[c]		1.8/0.08		0.0/0.00	20/0.33		0.8/0.02			0.0			27	22	14	0	2		
5/9 0730	1090	56	9.4	89	41	7.5	3.8/0.19	1.5/0.12	2.0/0.09	0.7/0.02	0.0/0.00	19/0.31	1.0/0.02	2.0/0.06	0.5/0.01	0.0/0.00	0.0	7.2	Fe 0.01, Cu 0.01, Al 0.06, Zn 0.03, PO_4 0.05, ABS 0.0	28	21	16	0	1		
6/6 1130	1750	60	7.9	79	27	7.1	—/0.20[c]		1.5/0.07		0.0/0.00	13/0.21		1.0/0.03			0.0			21	26	10	0	4		
7	Not sampled																									
8/9 1135	1510	70	6.0	67	20	6.9	—/0.13[c]		1.3/0.06		0.0/0.00	12/0.20		0.0/0.00			0.0			15	32	7	0	3		
9/12 1245	2140	72	5.7	66	22	6.7	2.5/0.12	0.5/0.04	1.2/0.05	0.4/0.01	0.00/0.00	12/0.20	0.2/0.00	0.1/0.00	0.4/0.01	0.1/0.01	0.0	4.8	Al 0.08, ABS 0.0, Zn 0.10	16	23	8	0	2		
10/9 1510	315	62	6.2	64	33	6.8	—/0.36[c]		1.2/0.05		0.0/0.00	14/0.23		1.2/0.03			0.0			25	12	18	7	10		
11/1 1010	355	64	6.5	68	38	7.2	—/0.26[c]		1.2/0.05		0.0/0.00	16/0.26		1.5/0.04			0.0			29	16	13	0	8		
12/6 1050	400	56	8.8	83	51	7.1	—/0.40[c]		1.5/0.07		0.0/0.00	24/0.39		2.1/0.06			0.0			39	15	20	0	5		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

TUOLUMNE RIVER AT HICKMAN-WATERFORD BRIDGE (STA. 30)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/7 1430	649	48	10.7	92	98.7	7.4	0.54[c]		7.7 / 0.33		0.0 / 0.00	29 / 0.48		13 / 0.37			0.0			58	38	27	3	3	Median 6.2.	
2/10 1535	259	60	10.3	103	205	7.9	1.02[c]		19 / 0.83		0.0 / 0.00	46 / 0.75		35 / 0.99			0.1			120	45	51	13	1	Maximum 7000.	
3/9 1355	129	65	10.9	115	507	8.2	2.22[c]		54 / 2.35		0.0 / 0.00	97 / 1.59		103 / 2.90			0.1			295	51	111	31	15	Minimum 0.23	
4/10 0930	121	66	10.1	107	553	8.2	2.77[c]		57 / 2.48		0.0 / 0.00	131 / 2.15		113 / 3.19			0.1			325	47	138	31	2		
5/9 0910	117	70	9.4	104	566	7.8	29 / 1.45	13 / 1.07	54 / 2.35	6.1 / 0.16	0.0 / 0.00	105 / 1.72	4.0 / 0.08	120 / 3.38	0.6 / 0.01	0.1 / 0.01	0.0	50	Al 0.06, As 0.01, PO_4 0.15, ABS 0.0	329	47	126	40	5		
6/6 1015	119	71	9.4	105	543	8.0	2.48[c]		58 / 2.52		0.0 / 0.00	110 / 1.80		112 / 3.16			0.1			316	50	124	34	4		
7	Not sampled																									
8/9 1210	121	77	8.2	98	593	8.2	2.93[c]		64 / 2.78		0.0 / 0.00	124 / 2.03		124 / 3.50			0.0			346	49	146	44	3		
9/12 1410	148	77	8.5	102	582	8.2	33 / 1.65	12 / 1.01	60 / 2.61	5.6 / 0.14	0.0 / 0.00	114 / 1.87	1.6 / 0.03	121 / 3.41	0.3 / 0.00	0.2 / 0.01	0.1	49	Al 0.01, Zn 0.01, PO_4 0.05, ABS 0.0	339	48	133	40	4		
10/9 1400	167	66	8.4	90	580	7.7	2.66[c]		62 / 2.70		0.0 / 0.00	114 / 1.87		116 / 3.27			0.1			338	50	133	40	10		
11/1 1200	265	58	9.1	89	372	7.8	1.70[c]		38 / 1.65		0.0 / 0.00	78 / 1.28		74 / 2.09			0.1			217	49	85	21	11		
12/6 0930	160	57	7.7	75	554	8.0	2.72[c]		56 / 2.44		0.0 / 0.00	112 / 1.84		115 / 3.24			0.1			323	47	136	44	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

TUOLUMNE RIVER AT TUOLUMNE CITY (STA. 31)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																										USGS
1/7 1210	900	45	9.8	81	328	7.1	—/1.36[c]		32/1.39		0.0/0.00	49/0.80		65/1.83			0.1			188	51	68	28	3	Median 620.	
2/10 1125		60	5.5	55	640	7.6	—/2.74[c]		61/2.65		0.0/0.00	96/1.57		136/3.84			0.1			366	49	137	58	5	Maximum 7000.	
3/9 1300	250	64	4.6	48	988	7.4	—/4.12[c]		108/4.70		0.0/0.00	156/2.56		218/6.15			0.2			565	53	206	78	15	Minimum 2.3	
4	Broken																									
5/9 1145	225	72	7.8	89	933	7.8	53/2.64	16/1.32	102/4.44	8.0/0.20	0.0/0.00	147/2.41	10/0.21	207/5.84	3.1/0.05	0.0/0.00	0.0	41	Fe 0.04, Cu 0.01, Al 0.12, Zn 0.05, PO_4 1.40, ABS 0.1	512	52	198	77	10		
6/6 1430	185	79	7.9	96	1060	8.2	—/4.64[c]		116/5.05		0.0/0.00	159/2.61		255/7.19			0.1			606	52	232	102	6		
7/20 0815	160	75	4.4	52	1270	7.5	73/3.64	19/1.53	145/6.31	7.3/0.19	0.0/0.00	178/2.92	13/0.27	298/8.40	2.0/0.03	0.2/0.01	0.23	40		686	54	259	113			
8/9 1500	165	79	6.6	80	1200	7.7	—/4.92[c]		128/5.57		0.0/0.00	180/2.95		283/7.98			0.2			686	53	246	98	6		
9/12 1020	223	72	2.2	23	883	7.8	59/2.94	13/1.04	96/4.18	6.2/0.16	0/0.00	186/3.05	7.2/0.15	179/5.05	4.2/0.07	0.2/0.01	0.1	43	As 0.01, PO_4 1.3, Zn 0.10, ABS 0.2	500	50	199	46	3		
10/9 1230	248	63	5.7	59	930	7.1	—/4.22[c]		116/5.05		0.0/0.00	182/2.98		189/5.33			0.2			532	55	211	62	10		
11/1 1445	250	60	5.0	50	927	8.3	—/4.24[c]		100/4.35		1/0.03	172/2.82		196/5.53			0.2			473	51	212	68	4		
12/5 1410	303	54	4.9	45	779	7.4	—/3.59[c]		87/3.78		0.0/0.00	156/2.56		162/4.57			0.1			446	50	180	52	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

YUBA RIVER AT MARYSVILLE (STA. 21)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 2.3	USGS
1/4 1040	700	44	11.5	93	109	7.1/7.6	0.96[c]		2.7/0.12		0/0.00	56/0.92		1.2/0.03			0.0			75[e]	11	48	2	20	Maximum 62.	
2/9 1230	1,640	50	11.3	99	104	7.3/7.9	0.92[c]		3.0/0.13		0/0.00	55/0.90		0.0/0.00			0.1			72[e]	12	46	1	15	Minimum 0.23	
3/14 0940	1,410	50	11.3	100	89	7.3/7.8	0.79[c]		2.2/0.10		0/0.00	44/0.72		1.5/0.04			0.0			61[e]	11	39	3	60		
4/5 1305	3,600	58	9.8	95	78	7.3/7.9	0.71[c]		1.1/0.05		0/0.00	40/0.66		2.0/0.06			0.0			54[e]	7	36	3	7		
5/4 0630	1,770	53	10.1	92	78	7.3/7.8	9.1/0.45	2.9/0.24	2.0/0.09	0.4/0.01	0/0.00	39/0.64	3.6/0.07	2.0/0.06	0.0/0.00	0.0/0.00	0.0	12	PO_4 0.00 ABS 0.0[d]	51[f]	11	34	2	5		
6/12 1000	924	64	9.2	96	76	7.3/7.5	0.67[c]		2.1/0.09		0/0.00	42/0.69		0.8/0.02			0.0			52[e]	12	33	0	9		
7/7 1100	70	75	8.8	103	118	7.3/7.9	1.04[c]		3.0/0.13		0/0.00	56/0.92		1.5/0.04			0.0			82[e]	11	52	6	0		
8/14 1415	41	78	8.0	96	146	7.4/8.0	1.38[c]		3.7/0.16		0/0.00	70/1.15		2.5/0.07			0.0			101[e]	10	69	12	5		
9/12 1220	24	77	8.3	99	166	7.6/8.0	20/1.00	6.6/0.54	3.3/0.14	0.5/0.01	0/0.00	76/1.25	17/0.35	2.5/0.07	0.1/0.00	0.1/0.01	0.0	20	PO_4 0.05 ABS 0.0[d]	107[f]	8	77	15	9		
10/4 1445	25	74	9.1	105	188	7.4/7.8	1.72[c]		4.1/0.18		0/0.00	84/1.38		1.0/0.03			0.0			130[e]	9	86	17	8		
11/14 1045	175	54	10.4	96	142	7.5/7.9	1.28[c]		3.2/0.14		0/0.00	73/1.20		1.8/0.05			0.1			98[e]	10	64	4	3		
12/12 1310	476	48	12.5	108	127	7.6/7.8	1.14[c]		3.2/0.14		0/0.00	61/1.00		3.6/0.10			0.0			88[e]	11	57	7	2		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 4

ANALYSES OF SURFACE WATER

CENTRAL VALLEY REGION (NO. 5)

YUBA RIVER NEAR SMARTVILLE (STA. 21a)

Date and time sampled P.S.T.	Discharge in cfs Daily Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in ppm / equivalents per million																			
1961																									Median 0.62	USGS
1/3 1405	637	46	10.9	91	104	7.1/7.8	0.94[c]		2.7/0.12		0/0.00	54/0.89		1.8/0.05			0.0			74[e]	11	47	3	3	Maximum 620.	
2/9 0930	3,030	48	11.2	96	101	7.3/7.9	0.88[c]		3.0/0.13		0/0.00	52/0.85		0.0/0.00			0.0			72[e]	13	44	1	15	Minimum <0.045	
3/14 0800	1,450	49	11.1	97	85	7.3/7.8	0.79[c]		2.2/0.10		0/0.00	43/0.70		1.8/0.05			0.1			61[e]	11	40	5	9		
4/5 1330	3,980	55	10.7	101	76	7.3/7.8	0.69[c]		1.3/0.06		0/0.00	39/0.64		2.5/0.07			0.0			54[e]	8	35	3	3		
5/4 0745	2,260	54	10.2	95	74	7.3/7.9	9.2/0.46	2.3/0.19	2.4/0.10	0.5/0.01	0/0.00	39/0.64	4.0/0.08	1.6/0.05	0.0/0.00	0.0/0.00	0.0	13	Fe 0.01 PO_4 0.00[d] ABS 0.0	52[f]	13	32	0	3		
6/12 1100	1,230	63	9.3	96	69	7.3/7.7	0.59[c]		2.4/0.10		0/0.00	40/0.66		0.2/0.01			0.0			49[e]	14	30	0	4		
7/7 1400	510	68	9.0	98	74	7.3/7.7	0.68[c]		2.1/0.09		0/0.00	39/0.64		0.8/0.02			0.0			53[e]	12	34	2	0		
8/14 0845	496	76	7.6	90	104	7.4/7.9	0.92[c]		2.7/0.12		0/0.00	56/0.92		2.8/0.08			0.0			74[e]	12	46	0	2		
9/12 1330	379	76	8.5	100	119	7.5/8.1	16/0.80	2.9/0.24	2.9/0.13	1.4/0.04	0/0.00	62/1.02	6.0/0.12	3.2/0.09	0.1/0.00	0.1/0.01	0.0	16	Zn 0.07 PO_4 0.05[d] ABS 0.0	80[f]	11	52	1	3		
10/5 1510	242	72	8.8	100	127	7.4/8.0	1.10[c]		3.2/0.14		0/0.00	68/1.11		1.0/0.03			0.1			91[e]	11	55	0	6		
11/14 0915	352	54	10.6	98	135	7.6/7.9	1.22[c]		3.3/0.14		0/0.00	69/1.13		1.2/0.03			0.0			96[e]	10	61	4	4		
12/13 1330	623	46	11.9	100	115	7.4/7.9	1.04[c]		2.8/0.12		0/0.00	59/0.97		2.0/0.06			0.0			82[e]	10	52	4	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 5

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

CARSON RIVER, EAST FORK NEAR MARKLEEVILLE (STA.115)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median	USGS
1/3 1100	39	33	10.0	69	176	7.5 / 8.1	1.32[c]		8.9 / 0.39		0 / 0.00	80 / 1.31		4.0 / 0.11			0.2			133[e]	23	66	0	3	6.2	
2/7 1135	59	42	10.5	83	148	7.5 / 8.1	1.04[c]		11 / 0.48		0 / 0.00	69 / 1.13		3.2 / 0.09			0.2			112[e]	32	52	0	3	Maximum 130.	
3/2 0815	84	41	10.3	80	150	7.5 / 8.0	1.02[c]		11 / 0.48		0 / 0.00	72 / 1.18		4.0 / 0.11			0.1			113[e]	32	51	0	1	Minimum 0.23	
4/4 0935	496	42	10.1	80	71	7.5 / 7.6	0.49[c]		5.5 / 0.24		0 / 0.00	39 / 0.64		2.0 / 0.06			0.1			54[e]	33	25	0	40		
5/2 0720		39	10.5	80	73	7.3 / 7.7	6.0 / 0.30	3.2 / 0.26	4.1 / 0.18	0.9 / 0.02	0 / 0.00	39 / 0.64	3.0 / 0.06	1.8 / 0.05	0.2 / 0.00	0.1 / 0.01	0.1	18	Fe 0.01 Al 0.05[d] PO4 0.05 ABS 0.0	56[f]	24	28	0	8		
6/2 0920	463	46	10.3	86	70	7.5 / 7.8	0.48[c]		5.0 / 0.22		0 / 0.00	41 / 0.67		0.2 / 0.01			0.1			53[e]	31	24	0	3		
7/6 0905	126	55	8.3	78	101	7.8 / 8.0	0.74[c]		6.3 / 0.27		0 / 0.00	54 / 0.89		2.0 / 0.06			0.1			76[e]	27	37	0	4		
8/9 0840	73	58	8.3	81	103	7.6 / 7.8	0.75[c]		6.4 / 0.28		0 / 0.00	56 / 0.92		2.0 / 0.06			0.2			78[e]	27	38	0	-		
9/7 0915	53	53	8.6	79	110	7.4 / 7.8	11 / 0.55	3.3 / 0.27	6.5 / 0.28	1.4 / 0.04	0 / 0.00	56 / 0.92	4.0 / 0.08	4.0 / 0.11	0.3 / 0.00	0.1 / 0.01	0.2	17	PO4 0.10 ABS 0.0[d]	76[f]	25	41	0	12		
10/5 1005	33	50	9.9	87	150	8.0 / 8.0	1.04[c]		10 / 0.44		0 / 0.00	75 / 1.23		5.0 / 0.14			0.2			113[e]	30	52	0	8		
11/9 1000	43	36	11.8	86	155	8.0	1.01[c]		13 / 0.57		0 / 0.00	77 / 1.26		6.2 / 0.17			0.2			117[e]	36	50	0	3		
12/6 1000	43	32	11.8	81	158	7.4 / 8.1	1.04[c]		12 / 0.52		0 / 0.00	73 / 1.20		6.2 / 0.17			0.3			119[e]	33	52	0	6		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 5

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

CARSON RIVER, WEST FORK AT WOODFORDS (STA. 115a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
1961																										
1/3 0930	12	32	9.6	66	81.8	7.2/7.8	0.62[c]		4.2/0.18		0/0.00	48/0.79		1.5/0.04			0.0			70[e]	22	31	0	4	Median 2.3	USGS
2/7 1050	16	38	10.7	80	78	7.3/7.9	0.62[c]		5.1/0.22		0/0.00	41/0.67		0.2/0.01			0.0			67[e]	26	31	0	1	Maximum 2400.	
3/2 0725	25	40	10.6	81	75	7.3/7.8	0.58[c]		3.6/0.16		0/0.00	43/0.70		1.2/0.03			0.1			64[e]	22	29	0	0	Minimum 0.06	
4/4 0850	142	38	10.9	81	48	7.3/7.6	0.31[c]		4.1/0.18		0/0.00	29/0.48		0.0/0.00			0.0			41[e]	37	16	0	15		
5/2 0630	129	39	10.3	78	51	7.2/7.4	4.0/0.20	2.7/0.22	1.9/0.08	0.9/0.02	0/0.00	29/0.48	0.0/0.00	0.5/0.01	0.1/0.00	0.1/0.01	0.1	17	Al 0.04 PO_4 0.00[d] ABS 0.0	41[f]	15	21	0	5		
6/2 1000	103	44	10.1	82	53	7.3/7.7	0.42[c]		2.5/0.11		0/0.00	28/0.46		0.3/0.01			0.1			45[e]	21	21	0	2		
7/6 0800	54	53	8.1	74	58	7.3/7.7	0.46[c]		2.0/0.09		0/0.00	30/0.49		0.8/0.02			0.0			49[e]	16	23	0	4		
8/9 0750	13	56	8.0	76	82	7.4/7.9	0.66[c]		3.6/0.16		0/0.00	50/0.82		0.0/0.00			0.0			70[e]	20	33	0	-		
9/7 0745	8.5	49	8.6	75	87	7.4/7.9	11/0.55	2.3/0.19	3.4/0.15	1.8/0.05	0/0.00	48/0.79	3.0/0.06	1.5/0.04	0.1/0.00	0.1/0.01	0.0	21	PO_4 0.05 ABS 0.0[d]	68[f]	16	37	0	6		
10/5 0855	11	47	9.4	80	81	7.4/7.8	0.60[c]		3.7/0.16		0/0.00	47/0.77		1.2/0.03			0.0			69[e]	21	30	0	6		
11/9 0900	13	37	11.1	82	81	7.5/7.6	0.60[c]		3.8/0.17		0/0.00	44/0.72		1.2/0.03			0.0			69[e]	22	30	0	2		
12/6 0915	7.2	33	11.3	78	78	7.2/7.8	0.62[c]		3.5/0.15		0/0.00	42/0.69		1.2/0.03			0.0			67[e]	19	31	0	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE C - 5

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

LAKE TAHOE AT BIJOU (STA. 39)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																										USGS
1/2 1500		37	10.4	77	93.8	7.3 / 7.9	0.66[c]		6.1 / 0.27		0 / 0.00	55 / 0.90		0.5 / 0.01			0.0			63[e]	29	33	0	3	Median 0.06	
2/6 1520		46	9.4	78	92.7	7.0 / 8.0	0.71[c]		5.7 / 0.25		0 / 0.00	52 / 0.85		2.0 / 0.06			0.0			62[e]	26	36	0	3	Maximum 130.	
3/1 1430		51	9.3	83	92	7.6 / 7.0	0.64[c]		6.9 / 0.30		0 / 0.00	50 / 0.82		1.6 / 0.05			0.0			62[e]	32	32	0	4	Minimum <0.045	
4/3 1455		54	9.5	88	100	7.5 / 7.7	0.68[c]		6.3 / 0.27		0 / 0.00	56 / 0.92		2.0 / 0.06			0.1			67[e]	28	34	0	1		
5/1 1430		55	9.0	84	89	7.6 / 7.7	10 / 0.50	1.7 / 0.14	5.7 / 0.25	1.3 / 0.03	0 / 0.00	50 / 0.82	1.0 / 0.02	1.5 / 0.04	0.0 / 0.00	0.0 / 0.00	0.1	11	Fe 0.02 PO_4 0.00[d] ABS 0.0	57[f]	27	32	0	10		
6/2 0730		45	9.6	79	84	7.3 / 7.0	8.9 / 0.44	2.1 / 0.17	5.5 / 0.24		0 / 0.00	44 / 0.72		1.8 / 0.05			0.1			56[e]	28	30	0	1		
7/5 1345		63	7.3	75	94	7.6 / 7.9	0.74[c]		5.9 / 0.26		0 / 0.00	50 / 0.82		2.0 / 0.06			0.1			63[e]	26	37	0	2		
8/8 1430		62	6.9	70	93	7.4 / 8.0	0.67[c]		5.9 / 0.26		0 / 0.00	54 / 0.89		1.8 / 0.05			0.0			62[e]	28	33	0	-		
9/6 1330		64	7.5	78	96	7.5 / 8.0	9.2 / 0.46	2.6 / 0.21	5.0 / 0.22	2.0 / 0.05	0 / 0.00	51 / 0.84	0.0 / 0.00	4.2 / 0.12	0.0 / 0.00	0.0 / 0.00	0.0	14	PO_4 0.00 ABS 0.0[d]	62[f]	23	33	0	1		
10/4 1500		64	8.0	83	94	7.8 / 8.0	0.70[c]		5.3 / 0.23		0 / 0.00	52 / 0.85		1.5 / 0.04			0.0			63[e]	25	35	0	5		
11/8 1515		50	9.3	82	94	8.0	0.66[c]		4.9 / 0.21		0 / 0.00	51 / 0.84		1.8 / 0.05			0.1			63[e]	24	33	0	2		
12/5 1600		40	10.0	77	92	7.4 / 7.9	0.68[c]		5.2 / 0.23		0 / 0.00	50 / 0.82		2.2 / 0.06			0.0			62[e]	25	34	0	2		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

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h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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32505-D-B 6-61 200 SPO

TABLE C - 5

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

LAKE TAHOE AT TAHOE CITY (STA. 38)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																									Median 0.23 Maximum 23. Minimum <0.045	USGS
1/2 1230		40	9.7	75	93.3	7.3/7.8	—/0.66[c]		5.7/0.25		0/0.00	54/0.89		0.5/0.01			0.0			62[e]	27	33	0	3		
2/6 1145		45	9.9	82	93.4	7.7/8.0	—/0.67[c]		5.7/0.25		0/0.00	53/0.87		0.8/0.02			0.0			62[e]	27	33	0	3		
3/1 1215		47	9.8	83	93	7.5/7.3	—/0.66[c]		6.4/0.28		0/0.00	50/0.82		0.9/0.03			0.0			62[e]	30	33	0	0.9		
4/3 1215		54	9.7	90	92	7.4/8.0	—/0.68[c]		7.5/0.33		0/0.00	54/0.89		2.0/0.06			0.1			62[e]	33	34	0	0.0		
5/1 1230		51	9.2	82	93	7.4/7.9	9.6/0.48	2.4/0.20	5.7/0.25	1.3/0.03	0/0.00	53/0.87	1.0/0.02	1.6/0.05	0.0/0.00	0.0/0.00	0.1	12	Fe 0.01 PO_4 0.00[d] ABS 0.0	60[f]	26	34	0	2		
6/1 1025		46	9.8	82	95	7.4/7.7	9.2/0.46	2.9/0.24	5.9/0.26		0/0.00	51/0.84		1.4/0.04			0.0			64[e]	27	35	0	1		
7/5 1130		63	7.6	79	93	7.8/7.9	—/0.78[c]		5.9/0.26		0/0.00	50/0.82		1.2/0.03			0.1			63[e]	25	39	0	3		
8/8 1100		71	7.1	80	91	7.4/8.6	—/0.64[c]		5.9/0.26		3/0.10	47/0.77		1.5/0.04			0.0			61[e]	29	32	0	-		
9/6 1015		64	7.8	81	95	7.6/8.0	9.4/0.47	2.6/0.21	5.4/0.23	1.7/0.04	0/0.00	52/0.85	1.0/0.02	4.1/0.12	0.0/0.00	0.0/0.00	0.0	14	PO_4 0.00 ABS 0.0[d]	64[f]	24	34	0	2		
10/4 1240		66	8.4	89	93	8.3/8.1	—/0.70[c]		5.3/0.23		0/0.00	52/0.85		2.0/0.06			0.0			63[e]	25	35	0	5		
11/8 1240		46	10.6	89	107	—/8.0	—/0.82[c]		5.7/0.25		0/0.00	60/0.98		1.5/0.04			0.1			72[e]	23	41	0	2		
12/5 1400		42	9.9	78	109	7.7/7.9	—/0.84[c]		5.4/0.23		0/0.00	64/1.05		1.2/0.03			0.0			73[e]	21	42	0	1		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE C - 5

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

LAKE TAHOE AT TAHOE VISTA (STA. 37)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/2 1325		45	9.4	78	93.6	7.5/7.9	—/0.66[c]		5.6/0.24		0/0.00	54/0.89		0.8/0.02			0.0			63[e]	27	33	0	3	Median 0.13 Maximum 6.2 Minimum <0.045	USGS
2/6 1215		44	9.9	81	95.5	7.4/8.0	—/0.70[c]		6.2/0.27		0/0.00	52/0.85		2.0/0.06			0.0			64[e]	28	35	0	3		
3/1 1255		48	9.5	82	95	7.5/7.1	—/0.68[c]		6.4/0.28		0/0.00	40/0.66		1.1/0.03			0.0			64[e]	29	34	1	1		
4/3 1300		55	9.4	89	92	7.4/8.0	—/0.64[c]		5.8/0.25		0/0.00	54/0.89		2.5/0.07			0.1			62[e]	28	32	0	0.6		
5/1 1315		50	9.0	79	94	7.3/7.9	11/0.55	1.6/0.13	5.8/0.25	1.4/0.04	0/0.00	52/0.85	1.0/0.02	1.6/0.05	0.0/0.00	0.0/0.00	0.1	12	Fe 0.01 PO_4 0.00[d] ABS 0.0	61[f]	26	34	0	5		
6/1 1100		45	9.5	79	96	7.4/7.8	8.9/0.44	3.0/0.25	6.1/0.27		0/0.00	51/0.84		1.6/0.05			0.1			65[e]	28	34	0	2		
7/5 1200		63	7.4	76	93	7.6/7.9	—/0.80[c]		6.0/0.26		0/0.00	50/0.82		2.0/0.06			0.1			63[e]	25	40	0	2		
8/8 1245		70	7.5	84	91	7.6/8.0	—/0.66[c]		5.9/0.26		0/0.00	53/0.87		1.7/0.05			0.0			61[e]	28	33	0	-		
9/6 1200		65	7.9	83	93	7.6/8.0	9.0/0.45	2.6/0.21	5.3/0.23	1.6/0.04	0/0.00	50/0.82	0.0/0.00	4.1/0.12	0.0/0.00	0.2/0.01	0.0	13	Cu 0.01 PO_4 0.00[d] ABS 0.0	61[f]	25	33	0	1		
10/4 1320		66	8.5	90	92	8.2/8.0	—/0.66[c]		5.0/0.22		0/0.00	50/0.82		1.0/0.03			0.0			62[e]	25	33	0	5		
11/8 1345		54	10.0	93	94	—/7.9	—/0.68[c]		4.9/0.21		0/0.00	51/0.84		1.2/0.03			0.1			63[e]	24	34	0	3		
12/5 1430		48	9.8	84	93	7.6/7.8	—/0.70[c]		5.0/0.22		0/0.00	53/0.87		1.9/0.05			0.0			63[e]	24	35	0	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as 0.0/0.00 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 5

ANALYSES OF SURFACE WATER

LAHONTAN REGION (6)

SUSAN RIVER AT SUSANVILLE (STA. 17b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																										
1/13 1015	14	32	11.1	76	157	7.1 / 8.0	1.54[c]		5.9 / 0.26		0.0 / 0.00	107 / 1.75		0.2 / 0.01			0.0			119[e]	14	77	0	3	Median 2.3	USGS
2/16 1525	78	39	11.3	86	114	7.5 / 8.1	0.93[c]		5.0 / 0.22		0.0 / 0.00	68 / 1.11		0.2 / 0.01			0.0			86[e]	19	47	0	20	Maximum 7,000.	
3/9 1155	35	44	10.6	86	126	7.5 / 8.1	1.10[c]		4.8 / 0.21		0.0 / 0.00	73 / 1.20		1.7 / 0.05			0.0			95[e]	16	55	0	3	Minimum 0.045-	
4/13 1030	88	42	11.0	87	90	7.4 / 8.0	0.84[c]		3.6 / 0.16		0.0 / 0.00	53 / 0.87		0.8 / 0.02			0.0			68[e]	16	42	0	2		
5/11 1330	77	44	10.2	83	93	7.6 / 7.8	9.6 / 0.48	4.4 / 0.36	1.8 / 0.08	0.7 / 0.02	0.0 / 0.00	57 / 0.93	1.0 / 0.02	0.5 / 0.01	0.3 / 0.00	0.1 / 0.01	0.0	28	Fe 0.03 Al 0.09 PO_4 0.10 Zn 0.01 ABS 0.0 [d]	74[f]	9	42	0	5		
6/15 1330	159	71	7.2	81	60	7.3 / 7.6	0.52[c]		1.8 / 0.08		0.0 / 0.00	36 / 0.59		0.0 / 0.00			0.0			45[e]	13	26	0	7		
7/13 1150	1.6	68	7.7	84	171	7.5 / 8.1	1.64[c]		5.9 / 0.26		0.0 / 0.00	107 / 1.75		0.8 / 0.02			0.0			129[e]	14	82	0	3		
8/2 0510	0.8	67	6.7	72	214	7.5 / 8.2	2.02[c]		7.7 / 0.33		0.0 / 0.00	141 / 2.31		1.0 / 0.03			0.0			162[e]	14	101	0	10		
9/13 1710	1.5	64	7.7	80	205	7.9 / 8.4	20 / 1.00	11 / 0.92	6.9 / 0.30	2.5 / 0.06	3 / 0.10	129 / 2.11	1.0 / 0.02	0.8 / 0.02	0.3 / 0.00	0.1 / 0.01	0.0	41	Tot. Alk. 135 [d] Fe 0.33 PO_4 0.15 Mn 0.10 As 0.01 ABS 0.0	151[f]	13	96	0	5		
10/5 1020	1.9	55	9.1	86	198	7.5 / 8.1	1.82[c]		6.3 / 0.27		0.0 / 0.00	126 / 2.07		0.2 / 0.01			0.0			149[e]	13	91	0	15		
11/15 1610	11	35	10.9	78	176	7.4 / 8.2	1.64[c]		5.1 / 0.22		0.0 / 0.00	112 / 1.84		0.0 / 0.00			0.0			133[e]	12	82	0	3		
12/6 1640	13	33	11.8	82	164	7.3 / 7.9	1.52[c]		5.7 / 0.25		0.0 / 0.00	102 / 1.67		1.8 / 0.05			0.0			124[e]	14	76	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

TRUCKEE RIVER NEAR FARAD (STA. 53)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1961																									Median 1.36	USGS
1/2 1015	189	32	11.1	76	102	7.5 / 7.9	0.74[c]		5.8 / 0.25		0 / 0.00	55 / 0.90		1.0 / 0.03			0.0			77[e]	25	37	0	3	Maximum 7000.	
2/6 1010	185	39	11.0	83	113	7.5 / 7.8	0.88[c]		6.0 / 0.26		0 / 0.00	58 / 0.95		3.2 / 0.09			0.1			86[e]	23	44	0	5	Minimum <0.045	
3/1 1030	272	40	10.7	82	106	7.5 / 7.8	0.86[c]		5.5 / 0.24		0 / 0.00	66 / 1.08		1.4 / 0.04			0.1			81[e]	22	43	0	2		
4/3 1025	522	48	9.6	82	84	7.4 / 7.6	0.62[c]		4.1 / 0.18		0 / 0.00	44 / 0.72		2.0 / 0.06			0.2			64[e]	22	31	0	20		
5/1 1030	574	50	9.0	79	80	7.8 / 7.7	8.0 / 0.40	2.4 / 0.20	4.4 / 0.19	1.0 / 0.03	0 / 0.00	41 / 0.67	3.0 / 0.06	2.4 / 0.07	0.9 / 0.01	0.1 / 0.01	0.0	18	Fe 0.02 Cu 0.02 PO_4 0.00 ABS 0.0 [d]	60[f]	23	30	0	10		
6/1 0845	488	44	9.9	81	67	7.5 / 6.6	6.6 / 0.33	2.4 / 0.20	3.3 / 0.14		0 / 0.00	34 / 0.56		1.5 / 0.04			0.0			51[e]	21	26	0	10		
7/5 0845	451	59	8.0	79	90	8.1 / 7.7	0.80[c]		5.0 / 0.22		0 / 0.00	52 / 0.85		3.4 / 0.10			0.0			68[e]	22	40	0	5		
8/8 0900	432	64	7.5	78	84	7.4 / 7.8	0.64[c]		4.6 / 0.20		0 / 0.00	49 / 0.80		1.0 / 0.03			0.0			64[e]	24	32	0	-		
9/6 0845	237	56	8.3	79	86	7.2 / 7.7	8.2 / 0.41	2.6 / 0.21	4.1 / 0.18	1.5 / 0.04	0 / 0.00	43 / 0.70	1.6 / 0.03	4.8 / 0.14	0.0 / 0.00	0.0 / 0.00	0.1	16	PO_4 0.05 ABS 0.0 [d]	60[f]	21	31	0	8		
10/4 0945	49	52	9.2	83	125	7.8 / 8.0	0.96[c]		6.3 / 0.27		0 / 0.00	69 / 1.13		2.0 / 0.06			0.0			95[e]	22	48	0	9		
11/8 1010	85	38	11.4	85	129	/ 8.0	1.02[c]		6.1 / 0.27		0 / 0.00	68 / 1.11		3.0 / 0.08			0.1			98[e]	21	51	0	4		
12/5 1015	99	33	11.3	79	130	7.5 / 7.5	13 / 0.65	3.8 / 0.31	6.9 / 0.30	1.9 / 0.05	0 / 0.00	67 / 1.10	4.3 / 0.09	3.5 / 0.10	0.1 / 0.00	0.2 / 0.01	0.03	23		90[f]	23	48	0	-		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 5

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

TRUCKEE RIVER NEAR TRUCKEE (STA. 52)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 2.3	USGS
1/2 1110	101	32	11.6	79	104	7.8/7.9	0.74[c]		6.0/0.26		0/0.00	57/0.93		0.8/0.02			0.0			74[e]	26	37	0	3	Maximum 7000.	
2/6 1100	99	42	10.7	85	108	7.0/7.8	0.80[c]		6.0/0.26		0/0.00	52/0.85		3.5/0.10			0.0			77[e]	25	40	0	5	Minimum <0.045	
3/1 1115	114	41	10.9	85	109	7.5/7.8	0.82[c]		6.4/0.28		0/0.00	44/0.72		1.0/0.03			0.1			78[e]	25	41	5	2		
4/3 1120	224	49	9.5	82	87	7.3/7.8	0.62[c]		5.2/0.23		0/0.00	43/0.70		2.2/0.06			0.3			62[e]	27	31	0	2		
5/1 1200	268	47	9.5	81	85	7.3/7.9	8.4/0.42	2.4/0.20	4.8/0.21	1.0/0.03	0/0.00	42/0.69	4.0/0.08	2.6/0.07	0.8/0.01	0.1/0.01	0.1	17	Fe 0.01 Al 0.04[d] Cu 0.01 PO_4 0.00 ABS 0.0	62[f]	24	31	0	6		
6/1 0950	122	43	9.6	77	65	7.3/6.9	7.2/0.36	1.9/0.16	2.9/0.13		0/0.00	33/0.54		1.3/0.04			0.0			46[e]	20	26	0	1		
7/5 1000	241	60	7.9	79	96	7.8/7.8	0.86[c]		5.7/0.25		0/0.00	49/0.80		1.4/0.04			0.1			69[e]	23	43	3	5		
8/8 0945	138	63	7.5	77	99	7.1/7.8	0.74[c]		5.9/0.26		0/0.00	56/0.92		2.0/0.06			0.0			71[e]	25	37	0	-		
9/6 0940	44	55	8.7	82	110	7.6/8.0	10/0.50	3.5/0.29	6.3/0.27	2.0/0.05	0/0.00	57/0.93	4.0/0.08	4.4/0.12	0.0/0.00	0.0/0.00	0.0	17	Cu 0.01 PO_4 0.00[d] ABS 0.0	75[f]	24	40	0	3		
10/4 1055	17	56	9.8	93	129	7.8/8.1	0.96[c]		7.6/0.33		0/0.00	62/1.02		5.2/0.15			0.0			92[e]	26	48	0	6		
11/8 1120	14	41	12.5	98	159	/8.0	1.20[c]		7.2/0.31		0/0.00	61/1.00		6.2/0.17			0.0			114[e]	21	60	10	3		
12/5 1120	15	38	12.9	97	154	8.0/8.0	1.11[c]		7.8/0.34		0/0.00	64/1.05		5.4/0.15			0.0			110[e]	23	55	3	2		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 4

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

WALKER RIVER, EAST NEAR BRIDGEPORT (STA. 116a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median	USGS
1/3 1430	5.4	40	7.0	54	321	7.3 / 8.1	1.90[c]		28 / 1.22		0 / 0.00	136 / 2.23		7.0 / 0.20			0.2			212[e]	39	95	0	5	0.62	
2/7 1430	5.4	42	9.9	78	225	8.1 / 8.2	1.52[c]		17 / 0.74		0 / 0.00	100 / 1.64		3.0 / 0.08			0.2			148[e]	33	76	0	3	Maximum 2100.	
3/2 1215	6.2	47	9.6	82	240	7.7 / 8.2	1.50[c]		21 / 0.91		0 / 0.00	112 / 1.84		3.5 / 0.10			0.1			158[e]	38	75	0	2	Minimum < 0.045	
4/4 1205	29	47	9.9	84	256	7.6 / 8.2	1.64[c]		22 / 0.96		0 / 0.00	153 / 2.51		3.4 / 0.10			0.1			169[e]	37	82	0	5		
5/2 1120	38	55	8.0	75	279	7.9 / 8.0	.25 / 1.25	5.2 / 0.43	25 / 1.09	4.0 / 0.10	0 / 0.00	130 / 2.13	25 / 0.52	4.8 / 0.14	0.4 / 0.01	0.4 / 0.02	0.2	25	Al 0.07 As 0.01[d] PO_4 0.20 ABS 0.0	179[f]	38	84	0	15		
6/1 1600	60	57	9.2	88	276	7.7 / 8.2	1.88[c]		23 / 1.00		0 / 0.00	138 / 2.26		1.3 / 0.04			0.2			182[e]	35	94	0	3		
7/6 1245	66	70	6.0	67	245	8.4+ / 8.1	1.74[c]		18 / 0.78		0 / 0.00	122 / 2.00		1.0 / 0.03			0.1			161[e]	31	87	0	4		
8/9 1215	63	71	5.8	65	243	7.6 / 7.8	1.74[c]		17 / 0.74		0 / 0.00	128 / 2.10		0.6 / 0.02			0.0			160[e]	30	87	0	4		
9/7 1300	64	62	6.2	63	238	7.6 / 7.8	.28 / 1.40	3.4 / 0.28	17 / 0.74	4.9 / 0.13	0 / 0.00	128 / 2.10	14 / 0.29	2.5 / 0.07	1.5 / 0.02	0.3 / 0.02	0.1	24	Zn 0.03 PO_4 0.75[d] ABS 0.0	159[f]	29	84	0	15		
10/5 1255	43	56	8.6	82	238	8.1 / 7.8	1.66[c]		17 / 0.74		0 / 0.00	127 / 2.08		2.8 / 0.08			0.1			157[e]	31	83	0	20		
11/9 1315	8.6	42	10.7	85	218	/ 7.9	1.54[c]		17 / 0.74		0 / 0.00	111 / 1.82		2.1 / 0.06			0.2			143[e]	32	77	0	9		
12/6 1300	4.0	43	9.4	76	249	7.4 / 8.0	1.76[c]		19 / 0.83		0 / 0.00	127 / 2.08		3.5 / 0.10			0.1			164[e]	32	88	0	8		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 5

ANALYSES OF SURFACE WATER

LAHONTAN REGION (NO. 6)

WALKER RIVER, WEST FORK NEAR COLEVILLE (STA. 116)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25° C)	pH a/b	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1961																									Median 2.2	
1/3 1530	43	33	10.6	74	136	8.3 / 8.0	0.94[c]		9.4 / 0.41		0 / 0.00	70 / 1.15		3.8 / 0.11			0.0			91[e]	30	47	0	4	Maximum 230.	USGS
2/7 1335	36	42	10.5	83	111	7.1 / 8.0	0.86[c]		7.4 / 0.32		0 / 0.00	58 / 0.95		0.5 / 0.01			0.1			74[e]	27	43	0	1	Minimum 0.06	
3/2 1030	44	40	10.3	79	120	7.5 / 8.0	0.78[c]		9.8 / 0.43		0 / 0.00	43 / 0.70		2.0 / 0.06			0.0			81[e]	36	39	4	2		
4/4 1115	269	43	10.3	83	47	7.4 / 7.6	0.38[c]		2.3 / 0.10		0 / 0.00	29 / 0.48		0.0 / 0.00			0.0			32[e]	21	19	0	35		
5/2 0920	257	40	10.1	78	44	7.1 / 7.6	3.2 / 0.16	2.4 / 0.20	2.0 / 0.09	0.7 / 0.02	0 / 0.00	24 / 0.39	0.0 / 0.00	0.0 / 0.00	0.1 / 0.00	0.1 / 0.01	0.1	10	Al 0.01 PO4 0.00[d] ABS 0.0	31[f]	19	18	0	5		
6/1 1700	366	44	10.2	83	46	7.3 / 7.5	0.37[c]		2.4 / 0.10		0 / 0.00	27 / 0.44		0.6 / 0.02			0.0			31[e]	21	18	0	4		
7/6 1100	157	57	8.3	80	55	7.3 / 7.7	0.42[c]		2.4 / 0.10		0 / 0.00	30 / 0.49		1.0 / 0.03			0.0			37[e]	19	21	0	3		
8/9 1045	40	62	8.6	88	101	7.6 / 7.9	0.77[c]		5.4 / 0.23		0 / 0.00	60 / 0.98		0.2 / 0.01			0.0			68[e]	23	39	0	2		
9/7 1200	26	62	9.0	91	129	7.6 / 8.1	15 / 0.75	3.5 / 0.29	5.5 / 0.24	1.3 / 0.03	0 / 0.00	72 / 1.18	4.0 / 0.08	2.5 / 0.07	0.1 / 0.00	0.1 / 0.01	0.1	12	PO4 0.05 ABS 0.0[d]	79[f]	18	52	0	9		
10/5 1200	26	56	9.8	93	162	8.1 / 8.2	0.92[c]		15 / 0.65		0 / 0.00	80 / 1.31		4.0 / 0.11			0.3			110[e]	41	46	0	10		
11/9 1150	35	38	11.2	83	188	8.1	0.84[c]		22 / 0.96		0 / 0.00	88 / 1.44		7.8 / 0.22			0.4			126[e]	53	42	0	2		
12/6 1145	26	33	10.9	76	175	7.4 / 8.2	0.90[c]		20 / 0.87		0 / 0.00	85 / 1.39		6.5 / 0.18			0.4			118[e]	49	45	0	4		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn) and zinc (Zn), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories; or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE C - 6

RADIOASSAY OF SURFACE WATERS

NORTH COASTAL REGION (NO. 1)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
1	Klamath River	Copco	6-5	6.3 ± 4.2	12.4 ± 4.3	0.07 ± 0.12	0.07 ± 0.28
			9-11	14.0 ± 5.0	0.0 ± 4.8	0.09 ± 0.54	0.0 ± 0.44
1a	Shasta River	Yreka	5-9	10.6 ± 4.2	15.6 ± 4.3	0.15 ± 0.30	0.07 ± 0.21
			9-12	5.2 ± 4.8	2.0 ± 4.8	0.0 ± 0.47	0.0 ± 0.43
1b	Scott River	Fort Jones	5-9	4.8 ± 4.0	10.2 ± 4.1	0.00 ± 0.27	0.08 ± 0.31
			9-12	6.2 ± 4.6	18.0 ± 4.8	0.0 ± 0.54	0.0 ± 0.61
1c	Klamath River above Hamburg Reservoir		5-9	5.7 ± 4.2	7.1 ± 4.3	0.25 ± 0.36	0.25 ± 0.41
			9-12	3.8 ± 4.6	2.8 ± 4.6	0.0 ± 0.48	0.0 ± 0.48
1d	Butte Creek	Macdoel	5-10	0.0 ± 4.1	4.1 ± 4.3	0.41 ± 0.41	0.00 ± 0.19
			9-12	3.2 ± 4.6	4.5 ± 4.6	0.0 ± 0.42	0.0 ± 0.45
1e	Antelope Creek	Tennant	5-10	0.7 ± 4.1	11.9 ± 4.4	0.16 ± 0.27	0.08 ± 0.30
			9-12	1.4 ± 4.6	2.2 ± 4.6	0.0 ± 0.43	0.16 ± 0.48
2	Klamath River	Somesbar	5-8	4.0 ± 4.1	0.2 ± 4.1	0.16 ± 0.26	0.08 ± 0.35
			9-6	6.4 ± 4.6	1.0 ± 4.6	0.08 ± 0.47	0.16 ± 0.48
2a	Salmon River	Somesbar	5-8	4.1 ± 4.0	9.3 ± 4.1	0.00 ± 0.26	0.24 ± 0.35
			9-6	3.6 ± 4.6	5.6 ± 4.6	0.0 ± 0.55	0.0 ± 0.55
2b	Klamath River	Seiad Valley	5-9	0.3 ± 4.0	5.7 ± 4.1	0.22 ± 0.32	0.07 ± 0.32
			9-12	5.4 ± 4.6	0.94 ± 4.6	0.0 ± 0.55	0.08 ± 0.65
3	Klamath River	Klamath	5-9	0.0 ± 4.0	2.3 ± 4.2	0.15 ± 0.34	0.07 ± 0.47
			9-6	8.9 ± 4.6	0.0 ± 4.6	0.23 ± 0.46	0.0 ± 0.38
3a	Smith River	Crescent City	5-9	8.1 ± 4.1	12.9 ± 4.3	0.08 ± 0.35	0.24 ± 0.44
			9-5	6.0 ± 5.0	3.9 ± 5.0	0.08 ± 0.42	0.0 ± 0.40

TABLE C - 6

RADIOASSAY OF SURFACE WATERS

NORTH COASTAL REGION (NO. 1)
(continued)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
3b	Redwood Creek	Orick	5-9	5.2 ± 3.9	1.2 ± 3.9	0.40 ± 0.48	0.24 ± 0.46
			9-5	3.4 ± 4.8	8.4 ± 5.0	0.0 ± 0.49	0.0 ± 0.52
4	Trinity River	Hoopa	5-8	2.3 ± 4.1	5.2 ± 4.2	0.08 ± 0.30	0.16 ± 0.38
			9-6	1.6 ± 4.8	8.4 ± 4.8	0.0 ± 0.48	0.0 ± 0.48
4a	Trinity River	Lewiston	5-8	2.1 ± 4.1	8.6 ± 4.3	0.00 ± 0.19	0.00 ± 0.19
			9-7	0.0 ± 4.6	7.2 ± 4.8	0.80 ± 0.57	0.0 ± 0.48
4b	Trinity River	Burnt Ranch	5-8	0.3 ± 4.1	6.0 ± 4.2	0.24 ± 0.29	0.24 ± 0.35
			9-6	0.0 ± 4.6	9.4 ± 4.6	0.0 ± 0.46	0.56 ± 0.65
5	Eel River	McCann	5-10	0.0 ± 4.2	0.0 ± 4.2	0.16 ± 0.32	0.24 ± 0.29
			9-4	7.2 ± 4.6	8.8 ± 4.6	0.0 ± 0.37	0.69 ± 0.64
5a	Van Duzen River	Bridgeville	5-10	0.0 ± 4.1	0.4 ± 4.2	0.74 ± 0.32	0.06 ± 0.49
			9-5	5.2 ± 4.6	10.2 ± 3.6	0.0 ± 0.45	0.34 ± 0.57
5b	Outlet Creek	Longvale	5-10	2.1 ± 4.2	4.1 ± 4.3	0.00 ± 0.00	0.67 ± 0.41
			9-4	6.0 ± 4.6	5.6 ± 4.6	0.08 ± 0.44	0.0 ± 0.39
5c	Eel River, Middle Fork	below Dos Rios	5-10	0.0 ± 4.2	0.5 ± 4.3	0.16 ± 0.33	0.00 ± 0.30
			9-4	3.4 ± 4.6	8.8 ± 4.6	0.22 ± 0.47	0.0 ± 0.37
5d	Eel River	above Dos Rios	5-10	0.0 ± 4.2	0.0 ± 4.2	0.08 ± 0.36	0.41 ± 0.45
			9-4	4.4 ± 4.6	5.8 ± 4.6	0.0 ± 0.55	0.0 ± 0.52
6	Eel River	Scotia	5-10	0.4 ± 4.2	2.5 ± 4.3	0.00 ± 0.24	0.34 ± 0.44
			9-4	7.4 ± 4.6	5.8 ± 4.6	0.0 ± 0.39	0.0 ± 0.35
6a	Mad River	Arcata	5-9	0.0 ± 4.2	1.0 ± 4.2	0.08 ± 0.24	0.25 ± 0.31
			9-5	0.0 ± 4.6	3.3 ± 4.6	0.0 ± 0.39	1.6 ± 0.45

TABLE C - 6

RADIOASSAY OF SURFACE WATERS

(NORTH COASTAL REGION (NO. 1)
(continued)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
7	Eel River, South Fork	Miranda	5-10	0.2 ± 4.2	5.8 ± 4.4	0.24 ± 0.44	0.71 ± 0.51
			9-4	0.0 ± 4.5	0.0 ± 4.5	0.0 ± 0.39	0.40 ± 0.51
7a	Mattole River	Petrolia	5-10	0.7 ± 4.1	7.3 ± 4.3	0.16 ± 0.41	0.96 ± 0.58
			9-5	0.0 ± 4.6	0.0 ± 4.6	0.0 ± 0.40	0.0 ± 0.49
8a	Russian River	Hopland	5-3	0.1 ± 4.1	9.2 ± 4.3	0.30 ± 0.39	0.45 ± 0.39
			9-6	3.4 ± 4.5	1.5 ± 4.5	0.0 ± 0.58	0.0 ± 0.60
8b	Navarro River	Navarro	5-11	0.0 ± 4.2	9.6 ± 4.5	0.15 ± 0.47	0.45 ± 0.46
			9-5	2.5 ± 4.5	0.0 ± 4.5	0.0 ± 0.43	0.0 ± 0.37
8c	Big River	Mouth	5-11	0.1 ± 4.3	13.4 ± 4.6	0.25 ± 0.36	0.58 ± 0.41
			9-5	0.0 ± 4.8	0.0 ± 4.8	0.08 ± 0.49	0.23 ± 0.52
9	Russian River	Healdsburg	5-2	0.0 ± 4.1	5.0 ± 4.3	0.08 ± 0.30	0.91 ± 0.56
			9-6	3.0 ± 4.6	7.1 ± 4.8	0.17 ± 0.43	0.25 ± 0.45
9a	Gualala River, South Fork	Annapolis	5-11	5.7 ± 4.2	2.0 ± 4.2	0.00 ± 0.33	0.09 ± 0.60
			9-5	1.9 ± 4.6	3.8 ± 4.6	0.08 ± 0.41	0.17 ± 0.43
10	Russian River	Guerneville	5-4	0.0 ± 4.2	2.1 ± 4.3	0.00 ± 0.33	0.17 ± 0.48
			9-5	5.7 ± 4.6	9.4 ± 4.6	0.17 ± 0.49	0.22 ± 0.51
10a	Russian River, East Fork	Potter Valley Powerhouse	5-3	8.2 ± 4.6	12.2 ± 4.7	0.08 ± 0.39	0.48 ± 0.45
			9-6	0.0 ± 4.6	3.0 ± 4.6	0.0 ± 0.40	0.0 ± 0.37
10c	Noyo River	Fort Bragg	5-11	0.0 ± 4.3	10.4 ± 4.6	0.24 ± 0.39	0.48 ± 0.45
			9-5	0.0 ± 4.6	0.0 ± 4.6	0.0 ± 0.43	0.16 ± 0.51

TABLE C - 7

RADIOASSAY OF SURFACE WATERS

SAN FRANCISCO BAY REGION (NO. 2)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
71	Arroyo Del Valle	VA Hospital	5-2	0.0 ± 4.5	8.3 ± 4.8	0.00 ± 0.30	0.60 ± 0.49
72	Napa River	St. Helena	5-4	2.0 ± 4.4	5.0 ± 4.5	0.07 ± 0.21	0.15 ± 0.25
			9-6	9.5 ± 4.6	10.3 ± 4.6	0.0 ± 0.43	0.0 ± 0.38
73	Alameda Creek	Niles	5-2	0.6 ± 4.3	12.3 ± 4.6	0.65 ± 0.50	0.24 ± 0.40
74	Los Gatos Creek	Los Gatos	5-2	0.0 ± 4.4	7.4 ± 4.5	0.80 ± 0.30	0.24 ± 0.38
			9-12	4.6 ± 4.6	8.0 ± 4.6	0.30 ± 0.43	0.38 ± 0.44
82	Coyote Creek	Madrone	5-3	0.2 ± 4.3	10.4 ± 4.5	0.25 ± 0.36	0.41 ± 0.45

TABLE C - 8

RADIOASSAY OF SURFACE WATERS

(CENTRAL COASTAL REGION (NO. 3)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
43	Salinas River	Spreckles	5-3	8.4 ± 4.5	12.7 ± 4.6	0.17 ± 0.38	0.25 ± 0.41
			9-7	14.1 ± 4.6	0.5 ± 4.6	0.76 ± 0.37	0.15 ± 0.39
75	San Lorenzo River	Big Trees Park	5-2	1.7 ± 4.1	11.1 ± 4.4	0.08 ± 0.36	0.16 ± 0.50
			9-12	4.4 ± 4.6	0.0 ± 4.6	0.0 ± 0.34	0.0 ± 0.40
76	Soquel Creek	Soquel	5-2	4.9 ± 4.3	6.3 ± 4.3	0.08 ± 0.36	0.25 ± 0.45
			9-8	4.6 ± 4.4	1.6 ± 4.6	0.24 ± 0.52	0.0 ± 0.45
77	Pajaro River	Chittenden	5-3	8.6 ± 4.4	5.5 ± 4.3	0.16 ± 0.27	0.08 ± 0.25
			9-7	10.0 ± 4.6	4.4 ± 4.6	0.0 ± 0.0	0.0 ± 0.0
77a	San Benito River	Bear Valley Fire Station	5-3	0.0 ± 4.0	13.0 ± 4.4	0.08 ± 0.34	0.24 ± 0.34
			9-7	5.0 ± 4.8	7.3 ± 4.8	0.0 ± 0.0	0.0 ± 0.0
83	Carmel River	Robles del Rio	5-3	5.2 ± 4.2	8.7 ± 4.3	0.39 ± 0.39	0.08 ± 0.22
96	Uvas Creek	Morgan Hill	5-3	3.6 ± 4.2	15.5 ± 4.5	0.00 ± 0.17	0.45 ± 0.35

TABLE 6 - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
11	Sacramento River	Delta	5-9	0.0 ± 4.2	8.1 ± 4.5	0.39 ± 0.29	0.16 ± 0.32
			9-11	1.0 ± 4.8	0.0 ± 4.8	0.08 ± 3.6	0.0 ± 0.33
11a	Cottonwood Creek	below North Fork	5-8	0.0 ± 4.1	12.6 ± 4.6	0.24 ± 0.39	0.24 ± 0.34
			9-7	12.9 ± 5.3	1.4 ± 5.3	0.0 ± 0.33	0.16 ± 0.38
11b	South Fork Cottonwood Creek above Cottonwood Creek		5-2	0.4 ± 4.2	5.4 ± 4.4	0.15 ± 0.32	0.16 ± 0.37
12	Sacramento River	Keswick	5-8	0.5 ± 4.3	9.7 ± 4.6	0.31 ± 0.32	0.08 ± 0.22
			9-7	1.0 ± 0.53	0.0 ± 0.53	0.0 ± 0.36	0.0 ± 0.35
12b	Cottonwood Creek	Cottonwood	5-8	0.0 ± 4.3	6.2 ± 4.5	0.30 ± 0.35	0.08 ± 0.28
			9-7	3.8 ± 0.51	4.8 ± 0.51	0.0 ± 0.38	0.22 ± 0.44
12c	Sacramento River	Red Bluff	5-2	0.4 ± 4.1	8.6 ± 4.2	0.08 ± 0.36	0.08 ± 0.30
			9-14	3.4 ± 5.5	10.8 ± 5.5	0.0 ± 0.32	0.0 ± 0.26
12d	Clear Creek	Igo	5-8	1.2 ± 4.3	3.6 ± 4.4	0.30 ± 0.31	0.23 ± 0.28
			9-7	0.5 ± 5.3	0.0 ± 5.3	0.14 ± 0.36	0.14 ± 0.36
13	Sacramento River	Hamilton City	5-1	3.3 ± 3.9	15.5 ± 4.2	0.25 ± 0.41	0.00 ± 0.36
			9-7	2.7 ± 0.55	5.2 ± 0.55	0.50 ± 0.43	0.0 ± 0.27
13a	Stony Creek	Hamilton City	5-1	0.0 ± 3.9	5.2 ± 4.1	0.25 ± 0.41	0.17 ± 0.34
13b	Sacramento River	Colusa	5-2	0.4 ± 4.0	3.0 ± 4.1	0.00 ± 0.27	0.17 ± 0.44
			9-8	0.0 ± 4.8	0.0 ± 5.0	0.33 ± 0.39	0.0 ± 0.21
13c	Stony Creek below Orland Diversion Dam		5-1	5.0 ± 4.5	5.9 ± 4.5	0.00 ± 0.32	0.08 ± 0.39
			9-6	12.3 ± 4.8	0.45 ± 4.5	0.16 ± 0.42	0.0 ± 0.38

TABLE C - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
13d	Thomes Creek	Paskenta	5-1	0.0 ± 4.4	6.0 ± 4.6	0.16 ± 0.32	0.24 ± 0.39
			9-6	2.1 ± 4.8	0.0 ± 4.8	0.28 ± 0.36	0.55 ± 0.43
13e	Elder Creek	Paskenta	5-1	0.0 ± 4.3	7.8 ± 4.6	0.25 ± 0.49	0.75 ± 0.59
			9-6	0.15 ± 4.5	0.0 ± 4.5	0.22 ± 0.44	0.0 ± 0.28
14a	Sacramento Slough	Knights Landing	5-4	1.7 ± 4.2	8.0 ± 4.4	0.16 ± 0.47	1.07 ± 0.68
			9-11	0.06 ± 1.8	0.0 ± 1.8	0.0 ± 0.39	0.41 ± 0.49
14b	Sacramento River	above Colusa Trough	5-4	0.0 ± 4.1	5.5 ± 4.3	0.33 ± 0.51	0.75 ± 0.62
			9-8	6.32 ± 5.03	6.60 ± 5.03	0.19 ± 0.20	0.03 ± 0.16
15b	Sacramento River	Freeport	5-5	1.5 ± 4.2	12.1 ± 4.4	0.17 ± 0.47	0.33 ± 0.51
			9-12	6.54 ± 4.8	0.0 ± 4.8	0.26 ± 0.24	0.10 ± 0.22
16	Sacramento River	Rio Vista	5-1	1.7 ± 4.1	8.2 ± 4.2	0.31 ± 0.45	0.47 ± 0.50
			9-12	6.2 ± 4.8	2.4 ± 4.8	0.06 ± 0.26	0.10 ± 0.26
16a	Calaveras River	Jenny Lind	5-8	9.2 ± 4.2	6.2 ± 4.1	0.08 ± 0.39	0.47 ± 0.51
17	Pit River	Montgomery Creek	5-10	2.9 ± 4.0	6.3 ± 4.1	0.38 ± 0.38	0.38 ± 0.49
			9-13	4.4 ± 4.8	3.8 ± 4.8	0.0 ± 0.24	0.0 ± 0.21
17a	Pit River	Canby	5-11	7.8 ± 4.2	7.6 ± 4.2	0.31 ± 0.31	0.46 ± 0.36
			9-13	12.0 ± 5.0	0.0 ± 4.8	0.19 ± 0.28	0.03 ± 0.26
17d	Indian Creek	Crescent Mills	5-12	3.2 ± 4.2	9.1 ± 4.4	0.33 ± 0.43	0.49 ± 0.51
			9-6	2.4 ± 4.70	2.5 ± 4.70	0.51 ± 0.31	0.0 ± 0.23
17e	Pit River	Bieber	5-11	3.2 ± 4.4	4.5 ± 4.4	0.08 ± 0.36	0.17 ± 0.39

TABLE 6 - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
18	McCloud River above Shasta Lake		5-9	0.0 ± 4.3	2.0 ± 4.4	0.52 ± 0.50	0.17 ± 0.35
			9-11	0.0 ± 5.0	0.0 ± 5.0	0.30 ± 0.26	0.0 ± 0.20
18a	Pit River, South Fork	Likely	5-11	2.1 ± 4.4	1.3 ± 4.3	0.17 ± 0.35	0.44 ± 0.52
			9-13	3.55 ± 5.0	0.0 ± 5.0	0.0 ± 0.23	0.0 ± 0.23
19	Feather River	Oroville	5-12	0.5 ± 4.3	5.5 ± 4.4	0.31 ± 0.26	0.16 ± 0.18
			9-12	4.7 ± 5.0	0.50 ± 5.0	0.24 ± 0.25	0.12 ± 0.22
20	Feather River	Nicolaus	5-3	1.6 ± 4.2	4.5 ± 4.3	0.31 ± 0.44	0.46 ± 0.40
			9-11	4.0 ± 5.0	1.20 ± 5.0	0.0 ± 0.23	0.0 ± 0.21
20a	Feather River below Shanghai Bend		5-3	0.0 ± 4.3	7.8 ± 4.6	0.24 ± 0.29	0.55 ± 0.47
			9-12	6.3 ± 5.0	4.1 ± 5.0	0.0 ± 0.26	0.0 ± 0.23
20b	Bear River	Mouth	5-4	3.8 ± 4.3	5.0 ± 4.4	0.15 ± 0.31	0.30 ± 0.40
21	Yuba River	Marysville	5-4	0.0 ± 4.1	5.5 ± 4.4	0.08 ± 0.23	0.16 ± 0.38
			9-12	1.4 ± 5.0	0.0 ± 5.0	0.0 ± 0.25	0.0 ± 0.22
21a	Yuba River	Smartville	5-4	5.5 ± 4.2	8.8 ± 4.3	0.24 ± 0.44	0.23 ± 0.36
			9-12	0.0 ± 5.0	0.0 ± 5.0	0.15 ± 0.25	0.0 ± 0.21
22	American River	Sacramento	5-5	5.9 ± 4.4	4.0 ± 4.4	0.08 ± 0.23	0.41 ± 0.35
			9-11	1.8 ± 5.0	0.0 ± 5.0	0.12 ± 0.22	0.06 ± 0.21
22a	American River	Nimbus Dam	5-3	0.4 ± 4.3	0.0 ± 4.3	0.16 ± 0.27	0.00 ± 0.30
			9-11	0.8 ± 5.0	2.5 ± 5.0	0.0 ± 0.19	0.0 ± 0.20
22b	American River, Middle Fork	Auburn	5-1	0.0 ± 2.9	0.0 ± 4.4	0.39 ± 0.43	0.31 ± 0.45
			9-12	0.0 ± 4.7	0.0 ± 4.7	0.0 ± 0.20	0.0 ± 0.17

TABLE C - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
22c	American River, South Fork	Lotus	5-3	0.0 ± 4.5	3.3 ± 4.4	0.16 ± 0.37	0.31 ± 0.41
			9-12	0.0 ± 4.70	0.0 ± 4.70	0.0 ± 0.25	0.0 ± 0.23
23	Mokelumne River	Woodbridge	5-5	4.0 ± 4.2	10.3 ± 4.4	0.76 ± 0.22	0.91 ± 0.53
			9-7	0.0 ± 5.0	0.0 ± 5.0	0.0 ± 0.24	0.0 ± 0.21
23a	Mokelumne River	Lancha Plana	5-8	2.1 ± 4.2	3.9 ± 4.2	0.22 ± 0.37	0.60 ± 0.43
			9-6	1.8 ± 5.0	0.0 ± 5.0	0.0 ± 0.22	0.45 ± 0.30
24	San Joaquin River	Friant	5-9	4.0 ± 4.4	8.1 ± 4.3	0.16 ± 0.53	0.49 ± 0.59
			9-6	3.2 ± 5.0	2.1 ± 5.0	0.0 ± 0.21	0.03 ± 0.22
25	San Joaquin River	Mendota	5-4	1.4 ± 4.3	0.5 ± 4.2	0.24 ± 0.40	0.97 ± 0.62
			9-6	0.7 ± 5.0	0.0 ± 4.70	0.27 ± 0.23	0.33 ± 0.24
25b	San Joaquin River	Hills Ferry Bridge	5-4	2.4 ± 4.3	0.0 ± 4.1	0.17 ± 0.44	0.94 ± 0.61
			9-7	0.0 ± 4.7	0.0 ± 4.70	0.36 ± 0.24	0.0 ± 0.24
25c	San Joaquin River	Fremont Ford Bridge	5-4	0.0 ± 4.0	0.7 ± 4.1	0.60 ± 0.50	0.68 ± 0.48
			9-7	5.2 ± 5.0	0.0 ± 4.70	0.67 ± 0.34	0.21 ± 0.28
26	San Joaquin River	Grayson	5-9	1.4 ± 4.0	0.0 ± 3.9	0.31 ± 0.52	0.76 ± 0.52
			9-12	9.2 ± 5.1	0.9 ± 5.1	0.25 ± 0.31	0.03 ± 0.28
26a	San Joaquin River	Maze Road Bridge	5-9	5.7 ± 3.9	4.4 ± 3.8	0.79 ± 0.55	0.55 ± 0.57
			9-12	4.1 ± 5.4	0.0 ± 5.1	0.34 ± 0.28	0.44 ± 0.29
27	San Joaquin River	Vernalis	5-4	6.5 ± 3.7	1.4 ± 3.6	0.15 ± 0.40	0.76 ± 0.53
			9-12	4.3 ± 5.1	0.0 ± 5.1	0.34 ± 0.24	0.31 ± 0.23
28	San Joaquin River	Antioch	5-1	6.7 ± 3.8	0.0 ± 3.5	0.38 ± 0.38	0.15 ± 0.36
			9-11	0.0 ± 5.1	0.0 ± 5.1	0.03 ± 0.18	0.22 ± 0.22

TABLE 6 - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
29	Stanislaus River	Mouth	5-4	0.7 ± 3.6	1.2 ± 3.6	0.24 ± 0.45	0.41 ± 0.44
			9-7	1.3 ± 5.1	0.0 ± 5.1	0.0 ± 0.20	0.09 ± 0.24
29a	Stanislaus River below Tulloch Dam		5-8	2.1 ± 3.6	2.7 ± 3.6	0.08 ± 0.36	0.16 ± 0.47
			9-8	0.7 ± 5.1	0.0 ± 5.1	0.0 ± 0.19	0.0 ± 0.16
30	Tuolumne River	Hickman-Waterford Bridge	5-9	5.8 ± 3.7	0.0 ± 3.4	0.08 ± 0.30	0.41 ± 0.40
			9-12	4.6 ± 5.1	0.0 ± 5.1	0.12 ± 0.19	0.0 ± 0.14
31	Tuolumne River	Tuolumne City	5-9	8.7 ± 3.7	0.6 ± 3.6	0.16 ± 0.43	0.41 ± 0.45
			9-12	7.2 ± 5.4	0.0 ± 5.1	0.50 ± 0.27	0.03 ± 0.18
31a	Tuolumne River below Don Pedro Dam		5-9	0.0 ± 3.4	4.1 ± 3.7	0.24 ± 0.43	0.40 ± 0.43
			9-12	3.8 ± 3.1	0.0 ± 5.1	0.12 ± 0.24	0.0 ± 0.24
32	Merced River	Stevinson	5-4	3.8 ± 3.7	2.2 ± 3.6	0.48 ± 0.45	0.40 ± 0.43
			9-7	9.0 ± 5.4	0.0 ± 5.1	0.69 ± 0.33	0.06 ± 0.33
32a	Merced River below Exchequer Dam		5-8	3.7 ± 4.3	8.4 ± 4.4	0.08 ± 0.28	0.53 ± 0.38
			9-8	3.4 ± 4.4	0.0 ± 4.4	0.20 ± 0.23	0.30 ± 0.24
33b	Kings River below Pine Flat Dam		5-1	5.3 ± 4.0	7.4 ± 4.0	0.08 ± 0.13	0.15 ± 0.25
			9-5	8.4 ± 4.4	1.4 ± 4.4	0.0 ± 0.22	0.0 ± 0.20
33c	Kings River below North Fork		5-1	1.6 ± 3.5	12.2 ± 3.8	0.41 ± 0.45	0.41 ± 0.48
			9-5	2.2 ± 4.4	0.0 ± 4.2	0.0 ± 0.23	0.0 ± 0.22
34	Kings River below Peoples Weir		5-9	5.5 ± 3.6	6.3 ± 3.7	0.41 ± 0.45	0.16 ± 0.33
			9-5	4.4 ± 4.4	0.0 ± 4.2	0.0 ± 0.23	0.0 ± 0.21
35	Kaweah River	Three Rivers	5-9	0.0 ± 3.5	10.6 ± 4.9	0.00 ± 0.38	0.35 ± 0.49
			9-5	3.8 ± 4.4	0.1 ± 4.2	0.20 ± 0.24	0.0 ± 0.02

TABLE C - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
36	Kern River	Bakersfield	5-10	1.0 ± 3.5	4.0 ± 3.6	0.78 ± 0.55	0.52 ± 0.49
			9-5	8.4 ± 4.4	1.3 ± 4.4	1.30 ± 0.34	0.80 ± 0.32
36a	Kern River below Isabella Dam		5-1	10.6 ± 3.9	5.5 ± 3.8	1.06 ± 0.64	0.68 ± 0.54
			9-1	6.8 ± 4.4	0.0 ± 4.4	1.78 ± 0.46	0.0 ± 0.24
36b	Kern River	Kernville	5-1	1.0 ± 3.9	16.4 ± 4.1	0.61 ± 0.53	0.38 ± 0.48
			9-1	5.0 ± 4.2	6.7 ± 4.2	0.0 ± 0.33	0.46 ± 0.39
41	Clear Lake	Lakeport	5-3	8.5 ± 3.7	4.5 ± 3.6	0.24 ± 0.47	0.24 ± 0.39
			9-6	3.5 ± 4.2	5.6 ± 4.2	0.0 ± 0.29	0.0 ± 0.26
42	Cache Creek	Lower Lake	5-3	14.8 ± 3.6	12.7 ± 3.6	0.31 ± 0.37	0.17 ± 0.41
			9-6	0.2 ± 4.2	0.4 ± 4.2	0.0 ± 0.25	0.0 ± 0.24
78	Bear River	Wheatland	5-4	1.8 ± 4.2	0.0 ± 3.9	0.08 ± 0.30	0.37 ± 0.30
			9-11	1.2 ± 4.2	0.3 ± 4.2	0.0 ± 0.22	0.0 ± 0.17
79	Cache Creek, North Fork	Lower Lake	5-3	1.0 ± 3.9	8.6 ± 4.1	0.41 ± 0.52	0.25 ± 0.45
			9-6	6.8 ± 4.2	2.2 ± 4.2	0.0 ± 0.19	0.0 ± 0.19
80	Cache Creek	Capay	5-4	2.6 ± 3.8	9.0 ± 4.0	0.26 ± 0.38	0.44 ± 0.52
			9-6	6.4 ± 4.4	13.2 ± 4.4	0.27 ± 0.27	0.0 ± 0.22
81	Putah Creek	Winters	5-4	1.0 ± 3.9	0.0 ± 3.8	0.35 ± 0.54	0.17 ± 0.41
85a	Big Chico Creek	Chico	5-1	0.0 ± 3.6	6.4 ± 4.0	0.48 ± 0.53	0.24 ± 0.44
87	Colusa Trough	Colusa	5-2	2.2 ± 3.9	1.8 ± 3.8	0.30 ± 0.39	0.68 ± 0.48
			9-7	34.3 ± 4.6	10.6 ± 4.4	0.0 ± 0.23	0.27 ± 0.29

TABLE C - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
87a	Sacramento River	Butte City	5-2	0.0 ± 4.0	0.5 ± 4.0	0.07 ± 0.27	0.22 ± 0.33
			9-7	0.0 ± 4.2	0.0 ± 4.2	0.21 ± 0.26	0.0 ± 0.22
88a	Cow Creek	Millville	5-8	0.0 ± 4.0	4.9 ± 4.1	0.57 ± 0.40	0.00 ± 0.30
			9-7	3.4 ± 4.4	0.0 ± 4.2	0.0 ± 0.26	0.0 ± 0.22
88b	Battle Creek	Cottonwood	5-2	2.3 ± 4.0	5.7 ± 4.1	0.08 ± 0.40	0.57 ± 0.44
			9-7	0.0 ± 4.2	0.0 ± 4.2	0.0 ± 0.21	0.0 ± 0.20
88c	Antelope Creek	Mouth	5-2	0.5 ± 4.4	0.0 ± 4.3	0.16 ± 0.27	0.08 ± 0.23
			9-14	4.7 ± 4.2	0.0 ± 4.2	0.0 ± 0.22	0.0 ± 0.21
88d	Redbank Creek	Red Bluff	5-1	0.0 ± 4.2	8.3 ± 4.4	0.32 ± 0.38	0.00 ± 0.19
88e	Antelope Creek	Red Bluff	5-2	0.0 ± 4.2	0.2 ± 4.2	0.31 ± 0.36	0.00 ± 0.22
			9-14	1.8 ± 4.2	0.0 ± 4.2	0.0 ± 0.21	0.0 ± 0.21
88g	Paynes Creek	Red Bluff	5-2	0.0 ± 4.1	5.4 ± 4.3	0.31 ± 0.36	0.00 ± 0.25
			9-14	2.3 ± 4.2	0.0 ± 4.2	0.12 ± 0.24	0.0 ± 0.18
91	Tule River	Porterville	5-9	6.0 ± 4.3	5.3 ± 4.2	0.00 ± 0.30	0.23 ± 0.28
92	Delta Mendota Canal	Mendota	5-9	0.0 ± 3.9	2.9 ± 4.1	0.23 ± 0.28	0.75 ± 0.49
			9-6	17.4 ± 4.4	0.0 ± 4.2	0.09 ± 0.26	0.49 ± 0.32
92a	Salt Slough	San Luis Ranch	5-4	3.6 ± 4.3	2.2 ± 4.3	0.49 ± 0.50	0.66 ± 0.57
			9-7	6.6 ± 4.2	2.2 ± 4.2	0.37 ± 0.32	0.28 ± 0.30
93	Delta Mendota Canal	Tracy	5-1	0.0 ± 4.2	6.5 ± 4.4	0.08 ± 0.30	0.82 ± 0.50
			9-11	9.2 ± 4.2	1.0 ± 4.2	0.06 ± 0.25	0.24 ± 0.28

TABLE C - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
94	Cosumnes River	Michigan Bar	5-8	0.0 ± 4.2	9.9 ± 4.5	0.00 ± 0.31	0.59 ± 0.58
			9-11	2.4 ± 4.2	0.0 ± 4.2	0.0 ± 0.21	0.0 ± 0.20
94a	Cosumnes River	McConnell	5-11	0.0 ± 4.3	2.4 ± 4.6	0.08 ± 0.14	0.42 ± 0.37
95a	Elder Creek	Gerber	5-2	4.2 ± 4.8	5.3 ± 4.8	0.38 ± 0.46	0.54 ± 0.46
95b	Thomes Creek	Mouth	5-2	1.6 ± 4.7	4.6 ± 4.5	0.23 ± 0.34	0.46 ± 0.50
99	Little Potato Slough	Terminous	5-1	2.1 ± 4.2	0.1 ± 4.2	0.31 ± 0.36	0.00 ± 0.25
			9-7	1.5 ± 4.2	0.2 ± 4.2	0.0 ± 0.24	0.0 ± 0.22
101	San Joaquin River	Garwood Bridge	5-5	9.0 ± 4.1	5.1 ± 4.0	0.38 ± 0.49	0.76 ± 0.53
102	San Joaquin River	Mossdale Bridge	5-4	1.6 ± 3.8	7.1 ± 3.9	0.84 ± 0.55	0.42 ± 0.46
			9-7	6.0 ± 5.1	0.0 ± 5.1	0.31 ± 0.21	0.56 ± 0.26
103	Old River	Tracy	5-1	9.6 ± 4.0	4.0 ± 3.9	0.33 ± 0.43	0.42 ± 0.46
			9-7	8.8 ± 5.1	0.0 ± 5.1	0.71 ± 0.31	0.03 ± 0.20
104	Old River	Clifton Court Ferry	5-2	0.0 ± 3.7	17.0 ± 4.2	0.35 ± 0.40	0.35 ± 0.35
			9-11	6.5 ± 5.4	0.0 ± 5.1	0.03 ± 0.20	0.15 ± 0.22
106	Italian Slough	Mouth	5-2	9.0 ± 3.8	15.0 ± 4.0	0.17 ± 0.20	0.17 ± 0.35
			9-11	4.7 ± 5.1	0.0 ± 5.1	0.15 ± 0.20	0.06 ± 0.18
107	Indian Slough	Brentwood	5-1	5.5 ± 3.8	13.8 ± 4.0	0.00 ± 0.34	0.71 - 0.50
			9-11	2.8 ± 5.4	0.0 ± 5.4	0.03 ± 0.28	0.37 ± 0.32

TABLE C - 9

RADIOASSAY OF SURFACE WATERS

CENTRAL VALLEY REGION (NO. 5)
(continued)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
108	Old River	Orwood Bridge	5-1	6.8 ± 3.9	8.2 ± 4.0	0.24 ± 0.29	0.47 ± 0.43
			9-11	2.2 ± 5.1	0.0 ± 5.1	0.03 ± 0.23	0.12 ± 0.25
109	Rock Slough	Knightsen	5-1	14.2 ± 4.9	17.0 ± 5.0	0.76 ± 0.28	0.38 ± 0.42
			9-11	6.7 ± 5.1	0.0 ± 4.8	0.12 ± 0.28	0.22 ± 0.29
110	Lindsey Slough	Rio Vista	9-12	8.2 ± 5.1	0.0 ± 5.1	0.03 ± 0.27	0.34 ± 0.31
111a	Bear Creek	Merced	5-10	2.1 ± 4.6	16.3 ± 5.0	0.00 ± 0.25	0.53 ± 0.47
112	Old River	Mandeville Island	9-6	4.6 ± 5.1	2.2 ± 5.1	0.03 ± 0.26	0.19 ± 0.28
113	Fresno River	Daulton	5-10	2.8 ± 4.6	22.4 ± 5.2	0.33 ± 0.51	0.83 ± 0.54
114	Chowchilla	Buchanan Damsite	5-10	2.7 ± 4.7	11.1 ± 5.0	0.33 ± 0.43	0.17 ± 0.43

TABLE C - 10

RADIOASSAY OF SURFACE WATERS

LAHONTAN REGION (NO. 6)

Sta. No.	Stream	Near	Date 1961	Micro-micro curies per liter			
				Dissolved Beta	Solid Beta	Dissolved Alpha	Solid Alpha
17b	Susan River	Susanville	5-11	4.7 ± 4.7	2.4 ± 0.7	0.00 ± 0.36	0.81 ± 0.57
			9-13	0.0 ± 4.4	1.8 ± 4.4	0.03 ± 0.15	0.0 ± 0.15
37	Lake Tahoe	Tahoe Vista	5-1	6.2 ± 4.7	9.8 ± 4.8	0.54 ± 0.55	0.45 ± 0.53
			9-6	0.0 ± 4.2	4.4 ± 4.4	0.0 ± 0.21	0.19 ± 0.25
38	Lake Tahoe	Tahoe City	5-1	23.9 ± 5.4	9.9 ± 5.1	1.47 ± 0.69	0.31 ± 0.44
			9-6	0.0 ± 4.2	1.8 ± 4.4	0.0 ± 0.21	0.0 ± 0.26
39	Lake Tahoe	Bijou	5-1	5.9 ± 5.0	2.2 ± 4.9	1.01 ± 0.58	0.39 ± 0.42
			9-6	0.0 ± 4.2	2.6 ± 4.4	0.0 ± 0.19	0.03 ± 0.25
52	Truckee River	Truckee	5-1	17.6 ± 0.51	13.2 ± 0.50	1.45 ± 0.70	0.61 ± 0.53
			9-6	0.0 ± 4.2	4.6 ± 4.2	0.0 ± 0.21	0.0 ± 0.23
53	Truckee River	Farad	5-1	15.2 ± 4.9	12.7 ± 4.9	1.53 ± 0.67	0.00 ± 0.40
			9-6	0.0 ± 4.2	6.7 ± 4.4	0.0 ± 0.21	0.73 ± 0.35
115	Carson River, East Fork	Markleeville	5-2	3.6 ± 4.2	5.9 ± 4.2	1.60 ± 0.69	0.51 ± 0.46
			9-7	0.0 ± 4.2	0.0 ± 4.2	0.0 ± 0.19	0.10 ± 0.23
115a	Carson River, West Fork	Woodfords	5-2	0.0 ± 4.1	4.1 ± 4.3	0.33 ± 0.39	0.67 ± 0.48
			9-7	5.6 ± 5.5	0.0 ± 5.2	0.79 ± 0.28	0.27 ± 0.19
116	Walker River, West	Coleville	5-2	0.0 ± 4.1	6.2 ± 4.3	0.00 ± 0.29	0.90 ± 0.61
			9-7	0.0 ± 5.2	0.0 ± 5.2	0.1 ± 0.20	0.0 ± 0.17
116a	Walker River, East	Bridgeport	5-2	12.9 ± 4.2	9.6 ± 4.2	1.18 ± 0.59	0.31 ± 0.37
			9-7	7.2 ± 5.2	1.3 ± 5.2	0.03 ± 0.25	0.0 ± 0.21

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